California State Health Care Innovation Plan Appendices

March 31, 2014

California State Health Care Innovation Plan Appendices
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Appendix I: Report on Design Process Deliberation

The California State Health Care Innovation Plan (Innovation Plan) design process is based on the Let's Get Health California (LGHC) Task Force final report described in ***Section I*** of the Innovation Plan. The LGHC Task Force, co-chaired by the Secretary of the California Health and Human Services Agency (CHHS), Diana Dooley, and former CMS Administrator, Don Berwick, M.D., included 23 leading health and health care experts, supported by a panel of 19 expert advisors. In addition to conducting several in-person Task Force meetings, the LGHC Task Force held four webinars to solicit public input before producing its final report in December 2012, which laid out a ten-year vision for California to become the healthiest state in the nation. [1]

Under the Centers for Medicare and Medicaid Innovation (CMMI) State Innovation Model (SIM) Design Grant, Secretary Dooley convened six work groups each tasked with developing payment, private sector, and public policy recommendations for potential inclusion in the Innovation Plan. The work groups were developed based on the goals identified by the LGHC Task Force – 1: Healthy Beginnings, 2: Living Well, 3: End of Life, 4: Redesigning the Health System, 5: Creating Healthy Communities, and 6: Lowering the Cost of Care. Subject matter experts co-chaired each work group and selected diverse stakeholders to join their respective work group. The following pages contain information on these work groups. **Table I.1** lists the individual members of each work group, as well as other CalSIM participants, and **Table I.2** provides the dates of key meetings and events.

Each work group identified reforms constituting important first steps toward advancing the ten-year goals of the LGHC Task Force. Work Groups 1 through 5 submitted payment reform, public policy and private sector recommendations to Work Group 6, which consisted of state leadership in health and health care and select subject matter experts. Work Group 6 served as the decision-making group for determining which reforms were ultimately included in the Innovation Plan, as well as the overall approach to lowering costs. Work Group 6 focused on payment and public policy recommendations for inclusion in the Innovation Plan; consideration of private sector recommendations will occur after the core Innovation Plan components are finalized. Since the work groups were organized around the six LGHC goals (rather than by payers, providers, or geography), the reforms emerging from the work groups support multi-payer initiatives that span multiple populations, fields of health and health care, and geographies. Altogether the work groups developed 40 recommendations, listed in **Table I.3**, which were reviewed by Work Group 6. Work Group 6 then selected particular recommendations for presentation and discussion during work group Co-Lead meetings held on June 11 and July 18, 2013. A meeting was also held on August 12, 2013 with representative payer and provider CEOs and directors of the state purchasing programs.

The Lewin Group supported the state and work groups by examining the rationale behind each reform, how they fit together, and prioritizing the various reforms by "scoring" them based on a number of factors including the extent of evidentiary support for each reform, the SIM grant requirements, and the state's priority criteria.[2] The final set of recommendations, outlined in the Innovation Plan, was identified by Work Group 6 in consultation with the other work groups, other state officials, private sector experts, potential partners (e.g., payers or organizations potentially implementing reforms), and federal experts and representatives.

In November 2013, CHHS received a four-month extension on the State Innovation Model Design Grant to further develop the selected initiatives and building blocks. Upon receipt of this extension CHHS formed "drill down" planning work groups around the Maternity Care Initiative, the Health Homes for Complex Patients Initiative, Accountable Care Communities, the Workforce Building Block (focusing on community health workers/promotores), and the state's accountability strategy. These work groups were comprised of public and private stakeholders, many of whom were involved in the initial six-month SIM design phase, in addition to new members. Work groups focused on defining goals, outcomes, and payment strategies (for Maternity) for the respective initiatives. In addition, conversations were held with the Integrated Healthcare Association and the California Health Performance Improvement initiative around how best to develop a proof of concept project to demonstrate cost transparency using existing data resources. During this period, foundation bridge monies were secured to maintain CalSIM momentum until the testing grant application and, hopefully, award monies are available. An info graphic of the overall Innovation Plan was designed and disseminated. Innovation Director, Patricia Powers, provided an overview of the Innovation Plan at a California Senate Health Committee hearing on cost containment.

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May 2012	*May 3* California Governor Jerry Brown issued Executive Order B-19-12 establishing the Let's Get Healthy California Task Force
December 2012	*December 19* LGHC Task Force and Expert Advisor Report Release
January 2013	*January 31* Public webinar on Multi-Stakeholder Health Care Payment Reform in California
February 2013	*February 7* California State Innovation Model Grant (CalSIM) Kickoff Call with Work Groups *February 28* Public webinar on the Berkeley Forum Report "A New Vision for California's Healthcare System"
March 2013	*March 26* Update Call with the Work Groups
April 2013	*April 1* California received State Innovation Models Design Grant from CMMI *April 30* Work Group Payment Reform Recommendations due to CalSIM Staff
May 2013	*May 24* Work Group Public Policy and Private Sector Recommendations due to CalSIM Staff
June 2013	*June 11* Work Group Co-Lead Meeting to share and discuss select recommendations The Lewin Group was brought on board to conduct market assessment, review purchaser assessment, analyze recommendations, and draft the State Health Care Innovation Plan
July 2013	*July 18* Work Group Co-Lead Meeting to discuss Additional Recommendations
August 2013	*August 12* Stakeholder Meeting with key Payers and Purchasers and Governor Jerry Brown *August 27* Meeting with financial stakeholders from Medicaid, CalPERS, PBGH, IHA to discuss suggested Innovation Plan Savings Model
September 2013	Working Draft Innovation Plan was presented to the state team for review
October 2013	Working Draft Innovation Plan was reviewed by Secretary Diana Dooley and key state staff *October 16* "CalSIM Review of Working Draft State Health Care Innovation Plan Webinar" with Work Group members and Co-Leads California received comments from CMMI
November 2013	California received a four month extension through March 2014 from CMMI
January 2014	Continued planning of the Innovation Plan in select work groups (Maternity Care, Health Homes for Complex Patients, Accountable Care Communities, Workforce, and the accountability strategy)
March 2014	Production of Innovation Plan Infographic Secured foundation bridge monies to maintain momentum for interim period between the Design and Testing phases Produced Final Innovation Plan Submitted Final Innovation Plan to CMMI

Table I.3: Recommendations Developed by Work Group 1 – Healthy Beginnings

Recommendation	Payment Reform	Public Policy	Private Sector
Childhood Fitness: Calls for better enforcement of school physical education guidelines in an effort to reduce obesity and increase physical fitness among children.		✓	
Childhood Obesity / Diabetes / Healthy Diets: Recommends that the California Department of Public Health (CDPH), the California Department of Health Care Services (DHCS), and First 5 California collaborate as leaders of sister agencies to support breastfeeding as the optimal way to feed infants, and to promote the introduction of solid foods at around six months of age. This recommendation aims to reduce the incidence of childhood obesity by establishing clear, consistent recommendations and policies across organizations, programs, and businesses throughout California. Research suggests that early infant feeding can impact a child's risk for obesity, making infancy a critical period in obesity prevention.		✓	✓
Early Learning / Developmental Screening: Calls for First 5 California, DHCS, and the Department of Developmental Services (DDS) to collaborate as leaders of sister agencies to seek systems change to improve the rate of child developmental screenings. Also, recommends that these agencies work with health plans and providers to promote best practices for developmental screening. This recommendation aligns with national standards and federal requirements and represents an important first step for early intervention and school readiness.		✓	✓
GIS Mapping: Recommends using CDPH Geographic Information System (GIS) mapping to better target public resources to "hot spots" for child immunizations, infant mortality, asthma hospitalizations, and childhood obesity. GIS mapping will allow resources to be better targeted to where they are needed as public allocation decisions can be based on timely data about actual incidence of disease.		✓	✓
Mitigating Childhood Trauma: Urban children and youth exposed to violence and poverty experience numerous physical and mental health challenges that are often overlooked or misunderstood in traditional health care and child service settings. Left unaddressed, trauma and chronic stress can have serious long-term negative effects on children. Recommends that CalSIM support the development of training materials and guidelines for pediatricians to help them detect children experiencing high levels of toxic stress and trauma and link these children/families to appropriate resources.			✓
School Health Center Pilots that rely on Tele-health: Provide integrated health team (Physician extender, Care Coordinators, Behavioral Coaches, Educators, Physician) via telehealth based in schools for students and family members to teach them the skills needed to improve high-risk behaviors and empower them around their health.	✓		

Table I.4: Recommendations Developed by Work Group 2 – Living Well

Recommendation	Payment Reform	Public Policy	Private Sector
Medi-Cal Diabetes Prevention Program: Recommends facilitating a convening of all payers including Medi-Cal with the goal of all plans and payers funding the Center for Disease Control (CDC) recognized Diabetes Prevention Program as well as legislation authorizing the Medi-Cal Program to reimburse providers for the delivery of the program. This program has shown a reduction in the progression from pre-diabetes to diabetes in participants after an average of 3 years post program completion.	✓	✓	
Patient Centered Health Home: Codifying into California law a definition for patient-centered health home with standardized metrics that includes DHCS to draw down the Affordable Care Act's (ACA) Section 2703 funding, thereby creating a standard understanding of the definition of a patient-centered health home in California.	✓	✓	
Patient-Centered Health Home for Medically Complex Patients: Support the promotion and sustainability of care models designed to manage medically complex patients with patterns of high utilization, multiple chronic conditions, and who live at home. The grant would not directly fund the additional services; rather, it would be used to eliminate barriers to spreading and scaling the provision of these services across California. Promotion of this model would be across all payer types, and include support for accessing ACA Section 2703 funds.	✓	✓	
Value-Based Insurance Design to Remove Financial Barriers to Medications: Advance the adoption of benefit designs that reduce financial barriers to medications for employees and dependents living with chronic illnesses. Benefit modifications can be implemented by self-funded employers as well as health plans across the public and private sectors.			✓
Wellness Trust at the State Level: Create a Wellness Trust Fund with oversight by an appointed Advisory Body funded by a statewide tax. This recommendation promotes the creation of a sustainable and regenerating funding source for activities that build healthy communities by creating environments which facilitate physical activity among California residents, improve diets, and reduce tobacco consumption.	✓	✓	
Workplace Wellness: Advance the adoption of well-designed workforce wellness programs by California employers. The grant would not fund these programs, but the State could support developing a library of resources and guidance to help employers to design workforce wellness programs that can achieve results tailored to the needs of individuals within their workforce.			✓

Table I.5: Recommendations Developed by Work Group 3 – End of Life

Recommendation	Payment Reform	Public Policy	Private Sector
Caregiver Training and Support: Provider organizations would partner with community agencies and stakeholder organizations to develop/modify, disseminate, and implement tools, trainings and processes that support formal and informal caregivers (family and friends) who care for seriously ill patients in their homes. Caregivers are an integral part of the health care teams' effort to provide quality care. When caregivers are well-prepared and supported they play a pivotal role in helping seriously ill individuals realize their stated preference of receiving care at home.			✓
Creating Advance Care Planning Systems: Engage large healthcare providers (e.g., integrated healthcare systems, medical groups, hospitals, and payors) in establishing systems within their organizations for consistently and reliably soliciting, documenting, and honoring patient treatment preferences. Patients and families will have the information, time, and support they need to make informed treatment decisions.			✓
Improving Access to Palliative Care for those with Advanced Illness: Recommends that public and private payment structures and policy shall provide patient benefits and provider payment to ensure access to comprehensive end of life care in hospital and community settings for all patients facing advanced illness with significant risk of death in the next year. By eliminating policy and payment barriers that prevent Californians from receiving appropriate care towards the end of life and targeting interventions appropriately, service utilization patterns change, leading to respecting patient's preferences, increased quality and lowered costs of care.		✓	
Improving Payment Incentives for those with Advanced Illness: Physician payments should be separated from the volume or cost of drugs or services they prescribe. Chemotherapy is used as an initial implementation step for the broader application of this principle. This recommendation highlights the importance for developing a mechanism that provides incentives for the coordination of care, alignment of care with patient preferences, and access to palliative care for patients with cancer.		✓	
Integrate Palliative Care Across the Care Continuum: Develop and implement strategies that integrate palliative care concepts, competencies, and clinical services in all health care settings – hospitals, clinics, nursing facilities, residential care, and through skilled home care; develop a standard way to report service provision so access and volume can be tracked; incorporate current best practices into care delivery, for example those put forth in the Clinical Practice Guidelines for Quality Palliative Care, developed by the National Consensus Project for Quality Palliative Care.			✓
Palliative and End of Life Workforce Development: Suggests that the Office of Statewide Health Planning and Development (OSHPD) and the California Healthcare Workforce Policy Commission should assess the general and specialty palliative care workforce needs in the state, and to take steps to mitigate shortages. This would develop the workforce needed to provide general and specialty palliative care-related services to Californians facing end of life, and to increase the skills and competencies of all healthcare providers to address the information and process needs of patients, and families with respect to advance care planning.		✓	
Public Empowerment and Awareness of Advance Care Planning: Recommends a public education campaign to design			✓

Recommendation	Payment Reform	Public Policy	Private Sector
and implement an interactive, culturally and linguistically appropriate effort to inform and encourage advance care planning for a range of life/illness circumstances and health literacy levels. Also, recommends a health system and provider campaign to prepare providers and health care systems to respond to the increased public awareness and act on requests for information and action as needed.			

Table I.6: Recommendations Developed by Work Group 4 - Redesigning the Health System

Recommendation	Payment Reform	Public Policy	Private Sector
Aligned Payment Innovation eXchange (APIX): Recommends the creation of APIX: the Aligned Payment Innovation eXchange, a statewide, formally chartered payment innovation clearinghouse. Such an entity would enable the continued learning, evaluation, and dissemination of practices that serve the Triple Aim.		✓	
Coordinated Acute Care Transition: Cross Sector Collaboration: Expand currently successful acute care transition teams to include a single hospital component and collaborative public and private sector ambulatory system components, sustained through a shared savings methodology. Pilot in 5 -10 counties and expand.			✓
Encouraging the Evolution of Visit-based Care (e-consults): Recommends the development of pilots to reimburse specialists and primary care physicians for electronic consultation. Such consultation enables patients to remain with their primary care providers when possible and appropriate, creates more efficiencies across the delivery system, and improves access to care.	✓		
Improving Maternity Care in California: Recommends aligning with existing national and state efforts to address this issue, particularly exploring of disparities in cesarean delivery (C-section) rates in California and the contributing factors behind the decision to deliver via cesarean; and piloting the use of "blended" public and commercial rates to incentivize adherence to national clinical standards and guidelines regarding avoidable cesarean deliveries. For example, a pilot could partially allocate the Medi-Cal global payment for prenatal care and delivery to hospitals that employ a team of "laborists:" hospitalists who can allow patients to labor rather than recommend unnecessary C-sections.	✓	✓	
Increasing Access to Care through Qualified Health Care Interpreters: Increase the use of qualified health interpreters for Medi-Cal patients in California. Target 100 specified high volume providers of Medi-Cal service to diverse patient populations in geographies of high volume use such as Los Angeles County and two other metropolitan areas to assure ability of the model to expand statewide. Currently Medi-Cal recipients in California do not access qualified health care interpreters in a large number of encounters with physicians and healthcare providers. While some hospitals/systems have begun to provide interpreter services more effectively and many community clinics are staffed by bilingual staff from their community, there are major gaps in the delivery of cost effective healthcare interpretation.			✓
Omnibus Training Workforce for the Multidisciplinary Team Care of California's Future: Strengthen and interweave specific, team-based care coordination strategies into training programs for each of the frontline disciplines. Because of the different nature of training programs for different disciplines, each one must be developed in a deliberate, customized fashion by experienced educators, yet synchronized with the expectations of future delivery system employers and alert to national innovations.			✓
Publicly Reported Data Stratification: Disparities in health care are widely documented and have important implications for the health of California's population. Unequal care also has implications for the quality and cost of health care. Elimination of inequities in care can result in improved population health by addressing systems barriers and improving the delivery of patient centered care. To achieve this goal requires that publicly reported quality data be stratified by race/ethnicity, preferred language, and payor source.		✓	

Recommendation	Payment Reform	Public Policy	Private Sector
Reducing Costs through Care Coordination (adopt new Current Procedural Terminology (CPT) Codes): Recommends the adoption and utilization of new CPT codes for transitional care management and complex chronic care coordination, which went into effect January 1, 2013. Additionally, recommends an assessment by the State of California to identify elsewhere in the industry existing payment models that encourage care coordination with potential applicability within state funded health care programs and for current and retired state employees, including the identification and prioritization of innovative and effective care coordination techniques that could lower State costs.	✓		
Team-Based Primary Care: Practice Coaching: This recommendation endorses the efforts of the California Advanced Primary Care Institute (CAPCI) to create stepwise regional/community-based practice coaching service to accelerate patient centered, modernized, team-based delivery systems. CAPCI is a multi-stakeholder 501c3 foundation including providers, purchasers, payers, and public interest organizations formed in 2012 to marshal the collected expertise and resources to support primary care redesign on behalf of our patients and communities and reverse the declining trend of primary care career choices.			✓
Technically Enabled Primary Care and Specialty Collaboration (a.k.a. "Project ECHO® (Extension for Community Healthcare Outcomes)" Model): The goal of the Project ECHO® model is to reengineer primary care-specialist relationships to equip rural and remote primary care providers with the capacity to safely and effectively treat complex diseases. The model re-envisions the roles of primary and specialty providers for specific conditions where the evidence strongly supports that best practice care results in improved quality indicators and/or cost containment.			✓

Table I.7: Recommendations Developed by Work Group 5 - Creating Healthy Communities

Recommendation	Payment Reform	Public Policy	Private Sector
"Accountable Care Community" ("ACC"): Support the development of "Accountable Care Communities" in California. An ACC builds on Accountable Care Organization (ACO) concepts but its mission is to improve the health of the entire community by emphasizing community prevention efforts and upstream environmental and social determinants of health. Demonstration funding could be used to build on ACOs and extend their reach to improve community population health outcomes. Among other things, these "ACCs" would provide a comprehensive, yet contained, vehicle to test payment reform options that incentivize prevention and population health.		✓	
Complete Streets: Amend criteria for State bicycle and pedestrian funding programs to prioritize/give extra weight to cities that have adopted bicycle and/or pedestrian master plans. After 5 years these local master plans would be required to receive state bicycle and pedestrian funding. This will increase opportunities and places for safe walking and biking to reduce risks for chronic diseases and improve health.		✓	
Establishing a Farm to Fork Office: Establish an interagency California Farm to Fork Office jointly staffed by the California Department of Education (CDE), California Department of Food and Agriculture (CDFA), and California Department of Public Health (CDPH) to encourage and expand the availability of affordable and locally grown produce through "farm-to-fork" policies and programs. Establishing a Farm to Fork office will provide a much needed home for interagency activities and efforts to promote California agriculture through procurement practices, capacity for schools to work with local farmers, support to increase access to farmers markets; and, advocacy to reduce barriers for securing Supplemental Nutrition Assistance Program (SNAP) benefits and utilizing them in places where fresh produce is sold.		✓	
EveryBody Walk Campaign: Develop and implement a statewide "Every Body Walk! California (EBW!CA) campaign that engages all sectors across the state in a shared commitment to increase walking among adults, youth, and children. The primary campaign strategy will be to secure commitments from organizations across all sectors of California to participate and to use their own assets and resources to increase walking among their employees, customers, students, congregants, patients, and clients.			✓
Health in All Policies (HiAP) Task Force: Build on the 2010 Report from the Strategic Growth Council, and the Brown Administration's effort to sustain the HiAP Task Force, to advance healthy food, physical activity, and safety priorities of the Healthy Community Goal. By including HiAP in the SIM application, California can continue to support and lead both state and local cross-sectoral strategies for better management, coordination and action to address community-level prevention, health inequities and chronic health conditions. Primary prevention is linked to and included in the broader health reform efforts, so programmatic and financial alignment will help to achieve positive health outcomes for all Californians.		✓	

Recommendation	Payment Reform	Public Policy	Private Sector
Healthy Prepared Meals: Develop a pilot program that provides opportunities to purchase low cost healthy meals for families through conveniently located access points such as schools, worksites, transit hubs, or neighborhood centers to secure healthy affordable meals for families in communities where retail access is limited.			✓
Integrator at an Individual / Patient Level: Provide reimbursement for a range of preventive services and programs, including community based prevention programs and "connectors", as recommended by a physician or other "licensed practitioner," such as community health workers. This change would enable a broader range of qualified providers, such as community health workers or medical assistants, to be reimbursed as well as open the door to payment for a wider range of evidence-based community prevention programs and services. Bundled episode payments may ultimately be a good mechanism for supporting community health workers or other navigator type functions.	✓		
Wellness Trust at the State or Local Level: Establish a Health and Wellness Trust at the state or local level to solicit, receive, pool, and distribute funding to benefit population-wide, community level prevention and wellness programs and services, targeting communities with the most significant health inequities and the conditions that lead to the most costly preventable chronic diseases. A Trust would provide a means to pool resources from within the health care system, including hospital community benefits. A trust could also provide a means to draw in and leverage resources from outside of the health care sector, such as from philanthropy, private donations, community reinvestment, LISC or transportation funding.		✓	

Appendix II: Geographic Variation Analysis

Analysis of Geographic Variation of Level of Care Integration and Access to High-Quality Medical Groups in California

Prepared by Berkeley Forum, University of California Berkeley School of Public Health

Assessing Care Integration in California – County-level Analysis

Objective

The level of care integration in each California county was estimated using data on physician medical group size. Larger physician organizations have been associated with more integrated care processes in several studies (e.g., Shortell and Rittenhouse). Further, Californians' access to highly integrated care and high-quality medical groups was assessed.

Data

The data source for medical group size is the IMS Health Incorporated *Data and Information Resources* 2010 data set that lists medical practices by county with number of physicians in the practice.

Independent Practice Organizations (IPAs) are another type of physician organization in which doctors are not directly employed by the group medical practice, but are joined for contractual and often clinical purposes. To estimate the prevalence of IPAs in each county the report Cattaneo and Stroud Inc. Report #7, Active Medical Groups by County by Line of Business (July 2013) was utilized.

Data on counties in which medical groups were practicing came from the California Office of the Patient Advocate (OPA) Medical Group Report Card, which lists the medical groups operating in each California county in 2013.[3] Quality ratings and number of patients served by the medical groups in 2011 were obtained from the Integrated Healthcare Association and merged the quality ratings with the 2013 data from the OPA website data.

Cost data for Medicare spending were obtained from 2009 Medicare Advantage and Medicare fee-for-service reimbursement records provided by Dr. Brian Biles at The George Washington University.

Data Source Limitations

The State Medical Board in 2011 reports about 100,000 doctors licensed to practice in California. The IMS data set contains approximately 54,000 doctors. Of the 100,000 doctors licensed, some may be inactive, employed in other states or employed in research or other areas unrelated to direct patient care, but the IMS data set likely undercounts the total number of doctors practicing in California. It also does not contain information on doctors who practice in IPAs.

In order to estimate counties with high penetration of independent practice associations, Cattaneo and Stroud data was used, which identifies IPAs in each county with the number of contracting physicians. It is common for doctors to belong to multiple IPAs and the Cattaneo

and Stroud data shows over 130,000 doctors belonging to medical groups or IPAs with 6 or more primary care physicians and at least one HMO contract. Since that exceed the number of licensed doctors in California, we believe this data overcounts physicians who belong to more than one IPA.

Methods

The Berkeley Forum report estimated the number of Californians receiving care in fully-integrated systems (Kaiser), highly integrated systems (from Medical Groups with more than 100 physicians) and Medium and Low integrated systems (based on estimates of physicians in IPAs who were considered medium integrated). IMS data was used to develop these estimates. The same methodology cannot be used at the County level because the level of IPA enrollment varies greatly at the county level, so a source of county-level IPA enrollment is needed. We also did not believe that the 100 physician cut-off level was appropriate for smaller counties in California.

To perform the county-level analysis IMS data and Cattaneo data was used. Based on the number of doctors practicing in physician organizations with over 100 doctors in counties with more than 300,000 residents (22 counties)and physician organizations with more than 20 doctors in counties with fewer than 300,000 residents (36 counties), counties were divided into "high," "medium" or "low" integration levels.

To estimate county-level access to high quality medical care, the number of three- and four-star medical groups reported practicing in each county was counted. Counties were divided into three groups: Those with three or more high-quality medical groups, those with two or three, and those with one or none.

Medicare costs were estimated by calculating a county's average Medicare Advantage and Medicare fee-for-service weighted by the proportion of enrollees in each type of plan. Data were not available for two counties. Counties one standard deviation above/below the mean cost were designated to be "high"/"low" cost, respectively, and other counties to be "medium" cost.

Results

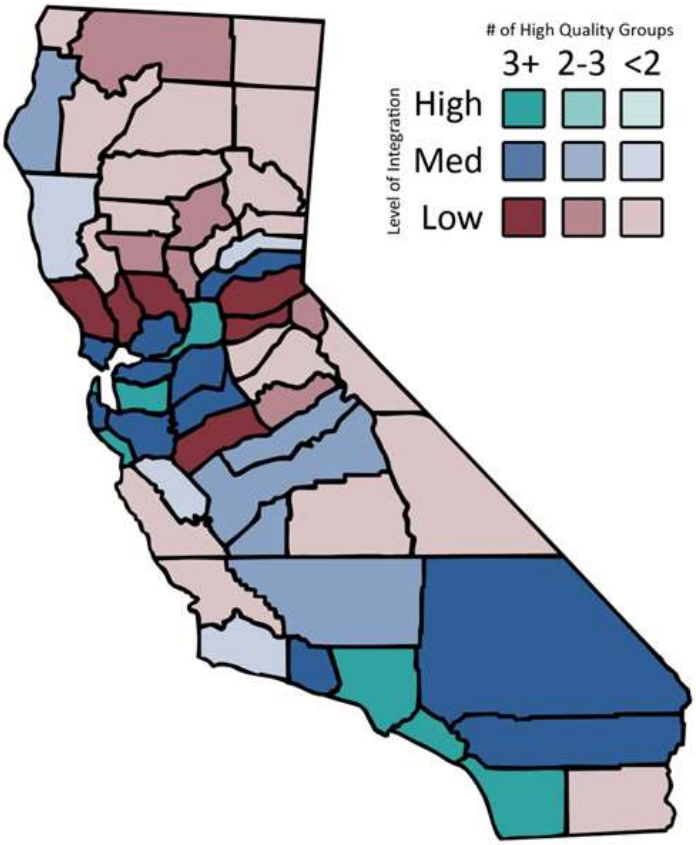
Seven counties in California have a high level of integrated care. These counties account for approximately 53% of the population of California. An additional twenty counties fall under medium integration, accounting for approximately 36% of the population of California. Twenty one counties fall under low integration, accounting for approximately 11% of the population of California.

Residents of 24 counties have broad choice of at least three high-quality medical groups. These counties account for 86% of the population. Twelve counties, representing 7% of the population, have two or three high-quality groups, and 22 counties have one or no high quality medical groups.

County size, access to large, integrated health care systems and choice of high-quality providers are closely linked. All counties with high levels of integration had three or more high-quality

groups. Eleven counties had medium levels of integration but access to multiple high-quality groups.

Figure II.1: Level of Medical Group and IPA Integration and High Quality Medical Group



Some broad geographic patterns are evident in the distribution of high-quality groups and integration. High quality/high integration counties tend to be in urban areas of the state. Suburban Bay Area counties and counties adjacent to the southern urban counties tend to have multiple high-quality choices but are only moderately integrated. Northern and central coast counties tend to have low levels of integration and less choice of high-quality groups.

Figure II.2: Level of Medical Group/IPA Integration and 2009 Medicare Cost

Three of the seven highly integrated counties were also high-cost counties. Four highly integrated counties were medium cost, and none were low-cost. Four-fifths of medium-integrated counties were medium-cost counties. Both of the medium-integrated/high cost counties were in the Bay Area. Low integration did not predict higher or lower cost.

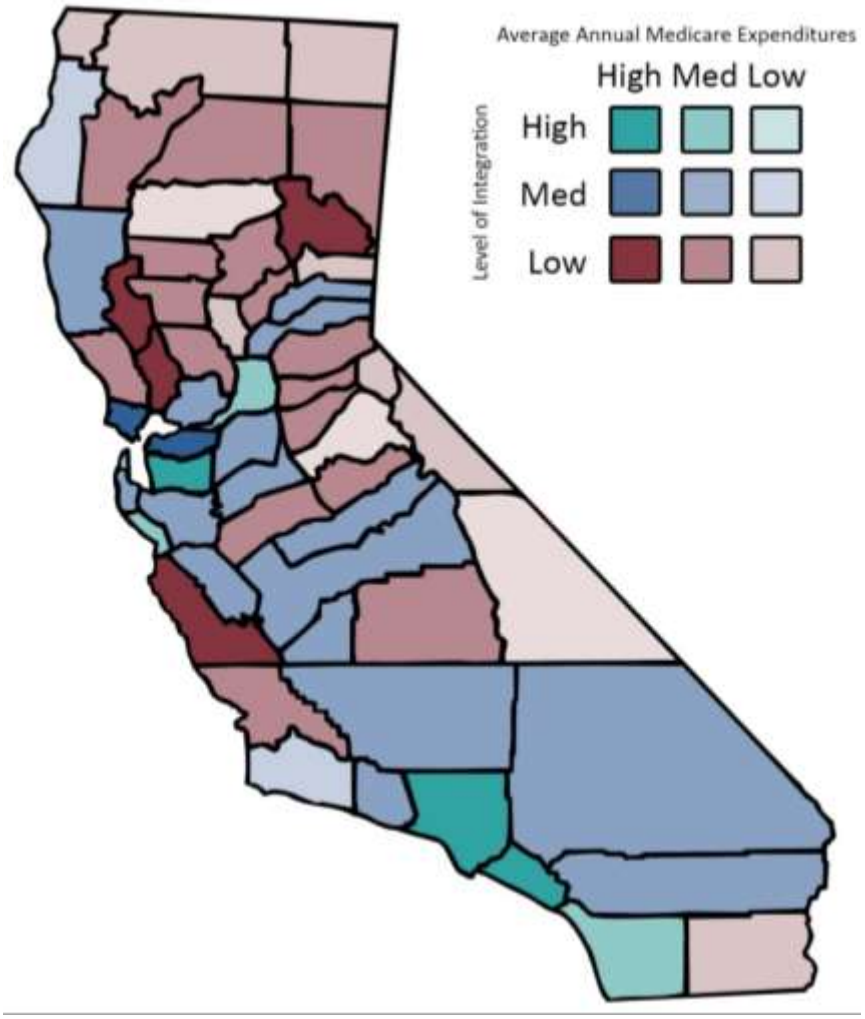


Figure II.3: California Medical Group Integration, Access to High-Quality Medical Groups, and Annual Medicare Expenditures (2009) by County

	Population	CA Licensed doctors (State Medical Board)	IMS # doctors	Ratio	Cattaneo # doctors	Ratio	IMS	Cattaneo	IPA Penetration (% of doctors in large groups that are members of IPA)	Adjusted (If IMS and Cattaneo are different choose higher level if IPA penetration is above 50%)	Number of 3- or 4- star medical groups in county	Weighted average Medicare expenses, 2009
Alameda County	1,510,271	4531	2458	54%	5808	128%	Medium	High	65%	High	3 or more	$ 9,683.12
Alpine County	1,175	2	1	50%	0	0%	Low	Low	0	Low	2 or 3	n/a
Amador County	38,091	65	26	40%	0	0%	Low	Low	0	Low	3 or more	$ 8,121.60
Butte County	220,000	471	319	68%	44	9%	Low	Low	0	Low	2 or 3	$ 8,078.35
Calaveras County	45,578	55	29	53%	0	0%	Low	Low	0	Low	0 or 1	$ 8,806.92
Colusa County	21,419	10	14	140%	0	0%	Low	Low	0	Low	2 or 3	$ 8,379.64
Contra Costa County	1,049,025	3004	1471	49%	6229	207%	Medium	High	20%	Medium	3 or more	$ 10,017.96
Del Norte County	28,610	42	37	88%	0	0%	Low	Low	0	Low	0 or 1	$ 7,306.82
El Dorado County	181,058	289	188	65%	110	38%	Medium	Low	20%	Low	3 or more	$ 8,386.49
Fresno County	930,450	1830	1074	59%	1986	109%	Low	Medium	57%	Medium	2 or 3	$ 8,092.10
Glenn County	28,122	10	11	110%	0	0%	Low	Low	0	Low	0 or 1	$ 8,106.32
Humboldt County	134,623	290	177	61%	215	74%	Low	Medium	100%	Medium	2 or 3	$ 7,493.70
Imperial County	174,528	134	109	81%	68	51%	Low	Low	0	Low	2 or 3	$ 7,850.84
Inyo County	18,546	43	17	40%	0	0%	Low	Low	0%	Low		$ 9,103.25
Kern County	839,631	1108	754	68%	1375	124%	Low	Medium	64%	Medium	2 or 3	$ 8,676.14
Kings County	152,982	136	109	80%	358	263%	Low	Medium	58%	Medium	2 or 3	$ 8,064.30
Lake County	64,665	77	44	57%	0	0%	Low	Low	0%	Low	0 or 1	$ 9,372.52
Lassen County	34,895	36	18	50%	0	0%	Low	Low	0%	Low	0 or 1	$ 8,912.50
Los Angeles County	9,818,605	27704	14068	51%	46341	167%	Medium	High	53%	High	3 or more	$ 9,953.16
Madera County	150,865	201	62	31%	199	99%	Low	Medium	100%	Medium	2 or 3	$ 8,121.50
Marin County	252,409	1449	559	39%	495	34%	Medium	Medium	47%	Medium	3 or more	$ 9,612.52
Mariposa County	18,251	10	5	50%	0	0%	Low	Low	0	Low	2 or 3	$ 8,744.86
Mendocino County	87,841	203	125	62%	75	37%	Medium	Low	55%	Medium	0 or 1	$ 8,066.32
Merced County	255,793	231	223	97%	235	102%	Low	Low	61%	Low	3 or more	$ 7,993.72
Modoc County	9,686	4	5	125%	0	0%	Low	Low	0	Low	0 or 1	$ 7,707.16
Mono County	14,202	30	1	3%	0	0%	Low	Low	0	Low	0 or 1	n/a
Monterey County	415,057	870	591	68%	158	18%	Low	Low	0	Low	0 or 1	$ 9,203.72
Napa County	136,484	476	204	43%	30	6%	Medium	Low	0	Low	3 or more	$ 9,376.28
Nevada County	98,764	298	134	45%	122	41%	Low	Medium	100%	Medium	0 or 1	$ 8,110.38
Orange County	3,010,232	9240	4995	54%	18229	197%	Medium	High	79%	High	3 or more	$ 9,512.20
Placer County	348,432	1015	550	54%	914	90%	Medium	Medium	33%	Medium	3 or more	$ 8,398.55

Figure II.3, continued: California Medical Group Integration, Access to High-Quality Medical Groups, and Annual Medicare Expenditures (2009) by County

	Population	CA Licensed doctors (State Medical Board)	IMS # doctors	Ratio	Cattaneo # doctors	Ratio	IMS	Cattaneo	IPA Penetration (% of doctors in large groups that are members of IPA)	Adjusted (If IMS and Cattaneo are different choose higher level if IPA penetration is above 50%)	Number of 3- or 4- star medical groups in county	Weighted average Medicare expenses, 2009
Plumas County	20,007	30	16	53%	0	0%	Low	Low	0	Low	0 or 1	$ 9,281.74
Riverside County	2,189,641	2,777	1,711	62%	5832	210%	Low	Medium	69%	Medium	3 or more	$ 8,923.86
Sacramento County	1,418,788	4,380	2,335	53%	4531	103%	High	High	54%	High	3 or more	$ 8,201.40
San Benito County	55,269	41	37	90%	125	305%	Low	Medium	100%	Medium	0 or 1	$ 8,631.70
San Bernardino County	2,035,210	3,665	2,101	57%	8393	229%	Medium	Medium	63%	Medium	3 or more	$ 8,950.98
San Diego County	3,095,313	9,559	5,600	59%	8590	90%	High	Medium	55%	High	3 or more	$ 8,721.60
San Francisco County	805,235	5,935	2,405	41%	5395	91%	High	High	50%	High	3 or more	$ 8,468.83
San Joaquin County	685,306	1,045	805	77%	1573	151%	Medium	Medium	59%	Medium	3 or more	$ 8,207.40
San Luis Obispo County	269,637	777	490	63%	452	58%	Low	Low	33%	Low	0 or 1	$ 8,148.60
San Mateo County	718,451	2,690	1,087	40%	1444	54%	Medium	Medium	10%	Medium	3 or more	$ 9,046.84
Santa Barbara County	423,895	1,196	726	61%	631	53%	Medium	Medium	69%	Medium	0 or 1	$ 7,828.20
Santa Clara County	1,781,642	7,140	3,197	45%	3874	54%	High	Medium	36%	Medium	3 or more	$ 8,854.18
Santa Cruz County	262,382	691	545	79%	442	64%	High	Medium	63%	High	3 or more	$ 8,663.90
Shasta County	177,223	428	360	84%	0	0%	Medium	Low	0	Low	0 or 1	$ 9,098.55
Sierra County	3,240	0	2		0		Low	Low	0	Low	0 or 1	$ 7,820.86
Siskiyou County	44,900	81	67	83%	0	0%	Low	Low	0	Low	2 or 3	$ 7,693.55
Solano County	413,344	895	727	81%	712	80%	High	Medium	26%	Medium	3 or more	$ 8,709.30
Sonoma County	483,878	1,334	725	54%	1198	90%	Low	Medium	42%	Low	3 or more	$ 8,657.30
Stanislaus County	514,453	934	778	83%	1298	139%	Medium	Medium	69%	Medium	3 or more	$ 9,142.14
Sutter County	94,737	187	216	116%	21	11%	High	Low	0	Low	2 or 3	$ 7,864.10
Tehama County	63,463	49	46	94%	0	0%	Low	Low	0	Low		$ 8,457.82
Trinity County	13,786	7	5	71%	0	0%	Low	Low	0	Low	0 or 1	$ 8,607.49
Tulare County	442,179	486	358	74%	881	181%	Low	Medium	34%	Low	0 or 1	$ 8,043.44
Tuolumne County	55,365	123	74	60%	0	0%	Low	Low	0	Low		$ 8,157.78
Ventura County	823,318	1,687	1,165	69%	1707	101%	Low	Medium	72%	Medium	3 or more	$ 8,997.00
Yolo County	200,849	502	245	49%	265	53%	Medium	Medium	0	Low	3 or more	$ 7,937.46
Yuba County	72,155	41	56	137%	0	0%	Low	Low	0	Low	0 or 1	$ 8,036.80

Appendix III: Supplemental Information and Tables for Description of the Health Care Environment

Table III.1: Population Characteristics of California Compared with the U.S. Overall Based on 2012 Census Data[4]

Characteristics	California	United States
Population	38,041,430	313,914,040
Female Sex, percent (%)	50.3	50.8
Male Sex, percent (%)	49.7	49.2
Age, percent (%)		
Under 5 years	6.7	6.4
5 – 18 years	24.3	23.5
18 – 64 years	63.6	62.7
65 years and over	12.1	13.7
Race, percent (%)		
White	39.4	63
Black or African-American	6.6	13.1
American Indian or Alaska Native	1.7	1.2
Asian	13.9	5.1
Native Hawaiian or Other Pacific Islander	0.5	0.2
Hispanic or Latino, percent	38.2	16.9
Median Household Income (2007-2011)	$61,632	$52,762

Source: U.S. Census State & County QuickFacts

A. Supplemental Information about Californians' Health Status

Although California often exceeds national indicators of health status, there is still room for improvement. Many adult medical issues originate in early childhood, and the California population is no exception. Although the state's infant mortality rate is better than the national average, significant racial disparities exist, with African-American babies dying at more than twice the rate of other racial groups. Childhood asthma has become an issue in recent years: nearly 1.5 million children in California have asthma, the most prevalent chronic condition for children ages 0 – 17. Furthermore, only 20 percent of California's adolescents are reporting consumption of fruits and vegetables five or more times per day and the rate of teenagers who meet physical activity guidelines is less than the national rate.[5]

The prevalence of chronic conditions among adults is another major health issue in California. Nearly 14 million adults (38 percent) in the state live with at least one chronic condition, and more than half of this population has multiple chronic conditions. Obesity remains one of the most pressing chronic conditions – between 1995 and 2010, obesity rates in California increased from 14.6 percent to 24.7 percent. There is a high correlation between obesity and a number of diseases, including type 2 diabetes, coronary heart disease, stroke, hypertension, arthritis, and various forms of cancer.[6]

Significant health disparities exist between different socio-economic, racial, and ethnic groups. Thirty-five percent of California adults with incomes below the federal poverty level (FPL) report poor health compared to only 14 percent of adults with incomes above FPL. African-Americans are more likely to report poor or fair health status than Caucasians, and have almost twice the rates of mortality amenable to health care as non-African-Americans. In 2009, 11 percent and 13 percent of California's Latino and African-American populations reported having been diagnosed with diabetes, respectively, compared to 6.3 percent among non-Latino whites.[7]

Finally, lack of affordable coverage is one of the primary barriers to health care in the state. Premiums for employer sponsored family coverage have increased 53 percent from 2005 to 2011, and unaffordable coverage is one of the primary reasons people are uninsured. California has one of the highest rates of people lacking health coverage (nearly seven million uninsured or 21 percent of the population), and has a disproportionally high rate of uninsured among African American, Hispanic/Latino, and Native American populations. Expansion of coverage through the state's Health Benefit Exchange (Covered California) and Medi-Cal program will be an important step toward reducing the number of uninsured.[8] Concurrently, the approaches advanced in the Innovation Plan are designed to address some of the other challenges facing California such as high rates of chronic conditions.

Table III.2: 2008 Distribution of Medi-Cal Expenditures at Various Annual Expenditure Thresholds

Annual enrollee expenditures threshold	Percentage of Enrollees (%)	Percentage of Medi-Cal FFS Expenditures (%)
< $10,000	93	24
> $10,000	7	76
> $25,000	3	54
> $100,000	< 1	14

Source: California HealthCare Foundation's *Where the Money Goes: Understanding Medi-Cal's High-Cost Beneficiaries (2010)*

Table III.3: Let's Get Healthy California Dashboard[9]

Table III.3a. Health across the Lifespan: Indicators, Baselines, and Targets

	Leading Indicator		CA Baseline	2022 CA Target	National Baseline	2020 National Target	Disparities
Healthy Beginnings: Laying the Foundation for a Healthy Life							
1	Infant Mortality, Deaths per 1,000 Live Births		5	4	7	Not Available	White/Asian: 4 Af. Am.: 11
2	All doses of recommended vaccines for children 19-35 months		68%	80%	70%	80%	Not Available
3	Respondents indicating at least 1 type of Adverse Childhood Experiences		59%	45%	Not Available	Not Available	Other: 45% White: 62%
4	Reduce Incidents of nonfatal child maltreatment (including physical, psychological, neglect, etc.) per 1,000 children		9	3	9	8	Asian/P.I: 3 Af. Am.: 25
5	Proportion of third grade students whose reading skills are at or above the proficient level		46%	69%	Not Comparable	Not Comparable	Asian: 69% Hisp/Lat.: 33%
6	Emergency department visits, 0-17 years due to asthma per 10,000		73	28	103	Not Available	Asian/P.I.: 28 Af. Am.: 236
7	Percentage of "physically fit" children, who score 6 of 6 on the required California school Fitness-gram test	5th graders	25%	36%	Not Available	Not Available	White: 36% Hisp./Lat.: 19%
		7th graders	32%	46%	Not Available	Not Available	Asian: 46% Hisp/Lat, P.I: 25%
		9th graders	37%	52%	Not Available	Not Available	Asian: 52% P.I.: 27%
8	Proportion of adolescents who meet physical activity guidelines for aerobic physical activity		15%	24%	18%	20%	Af. Am.: 24% Asian: 9%
9	Adolescents who drank 2 or more glasses of soda or other sugary drink yesterday		27%	17%	20%	Not Available	Asian: 17% 2+ Races: 38%
10	Adolescents who have consumed fruits and vegetables five or more times per day		20%	32%	Not Comparable	Not Comparable	Placer County: 32% Orange County: 15%
11	Proportion of children and adolescents who are obese or overweight	2-5 yrs.	12%	9%	11%	10%	White: 9% Hisp./Lat: 15%
		6-11 yrs.	12%	8%	17%	16%	2+ Races: 8% Hisp./Lat.: 16%
		12-19 yrs.	18%	12%	18%	16%	Asian: 12% Hisp./Lat.: 24%
12	Proportion of adolescents who smoked cigarettes in the past 30 days		14%	10%	20%	16%	Asian/P.I.: 10% White: 15%
13	Frequency of sad or hopeless feelings, past 12 months	7th graders	28%	25%	Not Available	Not Available	Male: 25% Female: 31%
		9th graders	31%	24%	Not Available	Not Available	Male: 24% Female: 36%
		11th graders	32%	27%	Not Available	Not Available	Male: 27% Female: 37%

Table III.3b. Health across the Lifespan: Indicators, Baselines, and Targets continued

	Leading Indicator		CA Baseline	2022 CA Target	National Baseline	2020 National Target	Disparities
Living Well: Preventing and Managing Chronic Disease							
14	Overall health status reported to be good, very good or excellent		85%	90%	83%	91%	2+ Races: 90% Am In/AK Nat: 75%
15	Proportion of adults who meet physical activity guidelines for aerobic physical activity		58%	66%	44%	48%	MultiRacial: 66% Hisp./Lat.: 50%
16	Adults who drank 2 or more sodas or other sugary drinks per day		20%	10%	Not Available	Not Available	Asian: 15% Latino: 26%
17	Adults who have consumed fruits and vegetables five or more times per day		28%	34%	24%	Not Available	$35,000 – $50,000: 34% < $20,000: 24%
18	Proportion of adults who are current smokers		12%	9%	21%	12%	Asian/P.I.: 9% Af. Am.: 17%
19	Percent of adults diagnosed with hypertension who have controlled high blood pressure		Medicare 79% PPOs 50% HMOs 78%	Medicare 87% PPOs 70% HMOs 86%	46%	65% by 2017	N/A
20	Percent of adults diagnosed with high cholesterol who are managing the condition		Medicare 76% PPOs 50% HMOs 70%	Medicare 91% PPOs 70% HMOs 84%	33%	65% by 2017	N/A
21	Proportion of adults who are obese		24%	11%	34%	31%	Other: 11% Af. Am.: 33%
22	Prevalence of diagnosed diabetes, per 100 adult		9	7	9	Not Available	White: 7 Af. Am.: 14
23	Proportion of adolescents (12-17 years old) and adults (18 years and older) who experience a Major Depressive Episode	Adolescents	8%	7%	8%	7%	N/A
		Adults	6%	5%	7%	6%	N/A
End-of-Life: Maintaining Dignity and Independence							
24	Terminal hospital stays that include intensive care unit days		22%	17%	17%	Not Available	N/A
25	Percent of California hospitals providing in-patient palliative care		53%	80%	Not Available	Not Available	N/A
26	Hospice enrollment rate		39%	54%	42%	Not Available	White: 54% Hispanic: 10%

Table III.3c. Pathways to Health: Indicators, Baselines, and Targets

	Leading Indicator		CA Baseline	2022 CA Target	National Baseline	2020 National Target	Disparities
Redesigning the Health System: Efficient, Safe, and Patient-Centered Care							
27	Percent of patients receiving care in a timely manner	Primary Care Physicians	76%	78%	Not Available	Not Available	White/English Speaking: 78% Asian/Non-English Speaking: 72%
		Specialists	77%	79%			White/English Speaking: 79% Asian/Non-English Speaking: 68%
28	Percent of patients whose doctor's office helps coordinate their care with other providers or services	Child/Adolescent	67%	94%	69%	Not Available	N/A
		Adult HMO	75%				
29	Preventable Hospitalizations, per 100,000 population		1,243	Top 5 counties: 727	1,434	Top 3 states: 818	Top 5 Counties: 727 Worst 5 Counties: 1853
30	30-day All-Cause Unplanned Readmission Rate (Unadjusted)		14%	25% reduction per hospital	14%	12% by 2013	N/A
31	Incidence of measureable hospital-acquired conditions		1 per 1,000 discharges	See footnote #40 in LGHC Report	Not comparable	Not Comparable	N/A
Creating Healthy Communities: Enabling Healthy Living							
32	Number of healthy food outlets as measured by Retail Food Environment Index		11%	21%	10%	Not Available	Santa Cruz: 21% Sutter: 9%
33	Annual number of walk trips per capita		184	233	186	Not Available	Urban: 233 Town/Rural: 121
34	Percentage of children walk/bike/skate to school		43%	51%	Not Available	Not Available	Latino: 51% White: 33%
35	Percent of adults who report they feel safe in their neighborhoods all or most of the time		91%	96%	Not Available	Not Available	White: 96% Latino: 85%
Lowering the Cost of Care: Making Coverage Affordable and Aligning Financing to Health Outcomes							
36	Uninsurance rate	Point in time	15%	5%	15%	Not Available	2+ Races: 8% Am In/AK Nat: 23%
		Some point in the past year	21%	10%	20%	Not Available	White: 14% Am In/AK Nat: 31%
		For a year or more	11%	4%	11%	Not Available	White: 6% Am In/AK Nat: 21%
37	Health care cost (Total premium + OOP) as % of median household income	Families	22%	23%	26%	Not Available	N/A
		Individuals	13%	13%	20%		
38	Compound Annual Growth Rate (CAGR) by total health expenditures and per capita costs. For comparison, CAGR by Gross State Product is included		Total: 7% Per Capita: 6% GSP: 4%	No greater than CAGR for GSP	Total: 7% Per Capita: 6% GDP: 4%	Not Available	N/A
39	High numbers of people in population managed health plans		48%	61%	23%	Not Available	Af. Am: 61% Am In/AK Nat: 41%

Table III.3d. Indicators for which further data collection and/or indicator development is needed:

Leading Indicator
Healthy Beginnings: Laying the Foundation for a Healthy Life
School-readiness
Prevalence of diagnosed diabetes in adolescents
Living Well: Preventing and Managing Chronic Disease
Effectively treating depression
End-of-Life: Maintaining Dignity and Independence
Advanced Care Planning
Redesigning the Health System: Efficient, Safe, and Patient-Centered Care
Percent of patients who had difficulty finding a provider who would accept new patients (primary care, specialty care including mental health specialists)
Linguistic and cultural engagement
Sepsis-related mortality
Lowering the Cost of Care: Making Coverage Affordable and Aligning Financing to Health Outcomes
Transparent information on both the cost and quality of care
Most care is supported by payments that reward value

Table III.4: HEDIS 2012 & CAHPS 2012 Scores by Payer Type

	Scores	Commercial HMO		Medicare Advantage		Medicaid Managed Care	
		CA	US	CA	US	CA	US
HEDIS scores	Weight Assessment for Children/Adolescents	53.7	44.7	NA	NA	70.5	46.0
	Childhood Immunization Status Combination 3	77.1	75.7	NA	NA	78.0	70.6
	Immunizations for Adolescents Combination 1	63.8	59.4	NA	NA	66.1	60.5
	Breast Cancer Screening Ages 40-69	73.5	70.5	69.1	68.9	51.8	50.4
	Cervical Cancer Screening	78.0	76.5	NA	NA	70.2	66.7
	Colorectal Cancer Screening	65.8	62.4	57.4	60.0	NA	NA
	Avoidance of Antibiotic Treatment in Adults With Acute Bronchitis	34.8	23.5	NA	NA	29.0	24.3
	Cholesterol Management for Patients With Cardiovascular Conditions	65.0	59.8	53.8	56.5	45.9	42.1
	Cholesterol Screening- Cardiovascular Care	90.3	88.1	89.0	88.8	83.8	82.0
	Controlling High Blood Pressure - Heart Care <140/90	70.8	65.4	63.8	64.0	34.3	56.8
	Comprehensive Diabetes Care						
	a) Eye Exam for Diabetes Patients	57.4	56.9	63.2	66.0	57.6	53.3
	b) Testing blood Sugar for people with diabetes	90.4	90.0	89.7	91.0	85.9	82.5
	c) Controlling blood sugar for diabetes patients < 8.0%	64.5	61.2	61.0	65.2	54.6	48.1
	d) Testing cholesterol for diabetes patients	87.8	85.3	88.0	88.3	80.9	75.0
	e) Controlling Cholesterol for Diabetes Patients <100	54.1	48.1	50.2	52.5	43.7	35.2
	f) Testing Kidney Function for Diabetes Patients	88.2	83.8	90.8	89.9	83.6	77.8
	g) Controlling Blood Pressure For Diabetes Patients <140/90	70.9	65.8	64.0	63.1	69.4	60.9
	Disease-Modifying Anti-Rheumatic Drug Therapy for Rheumatoid Arthritis	85.6	87.6	69.8	72.7	NA	68.9
	Use of Imaging Studies for Low Back Pain	80.5	74.4	NA	NA	81.6	75.8

	Scores	Commercial HMO		Medicare Advantage		Medicaid Managed Care	
		CA	US	CA	US	CA	US
	Annual Monitoring for Patients on Persistent Medications	81.2	81.9	89.0	90.9	81.1	83.9
	a) Annual Monitoring for Members on ACE Inhibitors or ARB	82.1	82.5	89.6	91.3	82.2	85.9
	b) Annual Monitoring for Members on Digoxin	88.3	85.4	92.1	93.4	86.6	90.3
	c) Annual Monitoring for Members on Diuretics	81.1	82.1	89.8	91.6	81.7	85.4
	Annual Flu Vaccine	52.8	53.3	74*	68.8*	NA	NA
	Prenatal and Postpartum Care						
	a) Timeliness of Prenatal Care	94.4	91.0	NA	NA	84.9	82.7
	b) Postpartum Care	83.9	80.6	NA	NA	65.6	64.1
	Osteoporosis Management in Women who had a Fracture	NA	NA	29.2	22.8	NA	NA
CAHPS scores	Overall Rating of Plans (8, 9, or 10 rating)	71.5	66.1	89*	89*	69.2	73.5
	Overall Rating of Health Care Quality (8, 9, or 10 rating)	75.5	77.6	87*	87*	64.2	69.9
	Getting Needed Care	81.9	85.5	84*	89*	65.3	75.5
	Customer Service	82*	86.1	89*	88*	57*	80.4
	Patient and Doctor Share Decisions	61.9	62.6	NA	NA	57.8	60.9
	Care Coordination	76*	NA	84*	NA	NA	NA

Source: National Committee for Quality Assurance Quality Compass
*Tentative scores

Table III.5: Health Insurance Coverage by Region

Region	Population[10]	Uninsured[11] (%)	Medicare FFS[12] (%)	Medicare Advantage[13] (%)	Medi-Cal FFS[14] (%)	Medi-Cal Managed Care[15] (%)	Private/ Other Coverage (%)
Bay Area/ Sacramento	9,291,004	14.9	13.4	5.2	4.2	8.2	54.1
Central Valley/ Central Coast/ North	7,676,877	20.4	13.7	2.9	10.1	10.7	42.2
Inland Empire	4,418,654	22.9	11.4	5.2	7.2	10.6	42.6
Los Angeles	9,825,761	25.9	11.8	4.4	8.2	12.2	37.5
Orange County/ San Diego	6,122,114	19.5	12.4	5.1	2.7	8.9	51.4
Total	37,334,410	20.6	12.6	4.5	6.59	10.2	45.5

Source: Lewin analysis of U.S. Census Bureau Small Area Health Insurance Estimates, CMS Medicare and Medi-Cal Enrollment Data

Table III.6a: Select Initiatives in California Related to CalSIM Initiatives and Building Blocks

Table III.6a Select Federally-Supported Initiatives in California Related to CalSIM Initiatives and Building Blocks

	Program or Initiative	Funding and/or Oversight	Initiative/ Building Block	Description	Time Period
1	California Maternity Episode Bundled Payment Project[16]	AHRQ Bundled Episode Payment Gain-sharing Demonstration & CMS BPCI	Maternity	Pacific Business Group on Health (PBGH), California Quality Collaborative (CQC), Integrated Healthcare Association (IHA), California Maternal Quality Care Collaborative (CMQCC), and Cynosure Health collaborated on the implementation of bundled payments for maternity care. This pilot involves payment reform, technical assistance, quality improvement programs, and patient engagement and education related to maternity care.	2012-2015
2	Partnership for Patients Hospital Engagement Networks[17]	CMS	Maternity	The Partnership for Patients includes hundreds of hospitals in California. Through twenty six Hospital Engagement Networks (HENs) the collaboration is helping to identify and disseminate best practices to reduce early elective deliveries.	2010 - 2013
3	Bundled Payments for Care Improvement (BPCI) Initiative[18]	CMS	Health Homes for Complex Patients (HHCP)	Under this model, organizations have entered into payment arrangements that instate financial and performance accountability for episodes of care to improve quality, deliver more coordinated care, and reduce costs to Medicare. In California, 10 sites are participating in BPCI and testing different payment model designs, including Retrospective Acute and Post-Acute Care, Retrospective Post-Acute Care Only, and Prospective Acute Care Hospital Stay Only, on varying numbers of clinical episodes.	2013 - Ongoing
4	Federally Qualified Health Center Advanced Primary Care Practice Demonstration[19]	CMS	HHCP	This demonstration is designed to show the effectiveness of the patient-centered medical home model in improving the quality of care, promoting better health, and lowering costs by having doctors and other health professionals working in teams to coordinate and improve care for Medicare patients. Across California, 69 FQHCs are participating in this demonstration.	2011 - 2014
5	Incentives for the Prevention of Chronic Disease in Medicaid Demonstration[20]	DHCS	HHCP, Accountable Care Communities (ACC)	The Medi-Cal Incentives to Quit Smoking demonstration is expected to engage over 25,000 Medi-Cal enrollees in smoking cessation. The program will provide free nicotine patches and small monetary incentives to eligible members who participate in telephone counseling with the California Smokers' Helpline.	2011 - 2016

	Program or Initiative	Funding and/or Oversight	Initiative/ Building Block	Description	Time Period
6	Delivery System Reform Incentive Pool (DSRIP) [21]	DHCS	HHCP	DSRIP, part of the Bridge to Reform, charged designated public hospital systems (DPHs) across California to develop 5-year plans that seek to improve the services delivered to patients through a system-wide approach focused on infrastructure development, innovation and redesign, population-focused improvements, and urgent improvement in care. Seventeen DSRIP plans were developed, representing all 21 DPHs in the state. If all DPHs are able to meet their set milestones, they are eligible for up to $3.4 billion in federal incentive payments between 2010 and 2015. The DPHs' commitment to the program also means they are obligated to spend $3 billion in their efforts. So far, 13 DPHs have achieved their goals of implementing or expanding their medical home models and restructuring their models of care to deliver improved care management services to high risk patients, including those with diabetes and other chronic conditions.	2011 – Ongoing Bridge to Reform
7	California Children's Services Demonstration Projects [22]	DHCS	HHCP	California Children's Services (CCS) Demonstration Projects are proposed across five organizations, encompassing different payment methodologies, including a county-level enhanced primary care case management (PCCM) program. It is a requirement that all models are capitated/global payment models.	2011 – Ongoing Bridge to Reform
8	Co-location of primary care clinics and behavioral health services[23]	SAMHSA	HHCP	In an effort to improve the health status of individuals with mental illness, SAMHSA has funded the Primary and Behavioral Health Care Integration Program since 2009. As of July 2013, 11 sites across California have participated in the program. Participating sites receive up to $500,000 annually for up to 4 years. They are working to deliver primary care services to publically funded, community-based behavioral health locations in order to increase access to primary care, improve prevention, promote early identification and intervention to reduce serious physical illness and chronic disease, increase integration of care, and improve patient overall health status.	2009 - Ongoing
9	Program of All-Inclusive Care for the Elderly (PACE)[24,25]	DHCS, CMS	HHCP	PACE provides a comprehensive, interdisciplinary team service model to individuals who would otherwise likely reside in nursing facilities. In most cases, these services allow recipients to stay in a home setting. In California, there are eight PACE programs that operate in diverse, low-income communities.	2007 - Ongoing
10	Low Income Health	DHCS, Counties	HHCP	This program was designed to serve as a bridge to health care reform	2010 –

	Program or Initiative	Funding and/or Oversight	Initiative/ Building Block	Description	Time Period
	Programs (LIHPs)[26, 27]			in 2014. It encompassed Medicaid Coverage Expansion and Health Care Coverage Initiative populations, and built on ten initial county Coverage Initiatives by offering participation to cover low income, uninsured individuals and provided additional support for financing of uncompensated care that counties are already providing. Beginning in January 2014, over 650,000 program participants were transferred to Medi-Cal through Covered California.	Ongoing Bridge to Reform
11	State Demonstration to Integrate Care for Dual Eligible Individuals[28]	CMS, DHCS	HHCP	In this demonstration, coverage is provided for Medicare and Medi-Cal services through an integrated delivery system that includes all medical services, long-term services and supports (LTSS), and coordination with/or coverage for behavioral health services. Eight counties and 13 health plans in California have been selected to participate in the demonstration. A maximum of 456,000 beneficiaries would be eligible.	2011 - Ongoing
12	Medicaid State Plan Amendment for Health Homes Planning Grant[29]	DHCS	HHCP	California received a planning grant to develop a state plan amendment to provide medical assistance under Title XIX of the Social Security Act to eligible individuals with chronic conditions who select a designated provider and team of health care professionals as the individual's health home.	2011
13	Health Center Quality Improvement Grant Awardees[30]	HRSA	HHCP	This program aims to improve access to services, quality of care, and clinical outcomes for existing Section 330-funded health centers through the patient-centered medical home (PCMH) model of care. This funding specifically focuses on improving outcomes related to cervical cancer screening for health center patients by supporting health centers in taking the operational steps necessary to achieve, maintain, or increase PCMH recognition at their sites and improve cervical cancer screening outcomes. In 2012, 84 clinics in California received funding under this program, totaling $4.6 million.	2012 - Ongoing
14	Intensive Outpatient Care Program (IOCP)[31]	CMS, Managed by PBGH	HHCP	IOCP targets high-risk, high-cost patients, where savings from coordination of care are likely to be significant. Already, PBGH members including Boeing, CalPERS, and PG&E have piloted this model with success in improving patient care and reducing health care costs. This initiative received $19 million from CMS through the Health Care Innovation Award program (see more information below) in 2012 to implement the IOCP.	2012 - Ongoing

	Program or Initiative	Funding and/or Oversight	Initiative/ Building Block	Description	Time Period
15	Pediatric Palliative Care Waiver (PPC)[32]	DHCS	Palliative Care	This waiver allows eligible children and their families to receive palliative care services during the course of the child's illness, while continuing to pursue curative treatment for the child's life-limiting or life-threatening medical condition in the 10 participating counties.	2006 - Ongoing
16	Assisted Living Waiver Program[33]	DHCS	Palliative Care	This program assists Medi-Cal enrollees, specifically eligible seniors and persons with disabilities, in remaining in their community as an alternative to receiving care in a licensed health care facility. Provider enrollment is open in 10 counties.	2009 - 2014
17	Community Transformation Grant (CTG) Program[34,35]	CDC	ACC	The CTG program is funded by the Affordable Care Act's Prevention and Public Health Fund. The CDC supports and enables awardees to design and implement community-level programs that prevent chronic diseases such as cancer, diabetes, and heart disease. This program provided $35 million in funding for efforts being implemented throughout California. 51 out of 58 counties in California received some type of CTG funding. The type of awards received included State-wide implementation Grants, County-wide Capacity Building Grants and Small Community Grants. Strategic priorities focus on tobacco-free living, active living and healthy eating, increased use of preventive services, healthy and safe physical environments, and social and emotional wellness. As of 2014, the funding for the CTG program was eliminated. Funds will be redirected into other CDC efforts.	Awards made during FY 2011 and FY 2012
18	HRSA Grants related to training for health professionals and clinical recruitment[36]	HRSA	Workforce	These grants include National Health Service Corps programming and the State Loan Repayment Program in California, which are authorized to repay educational loans of health professionals that commit to practicing in underserved areas in public or non-profit entities for between two and four years. Through the ACA, the Personal and Home Care Aide State Training Program has provided almost $750,000 annually to support Allied Health career pathways through the California Community Colleges. Additionally, two programs in San Francisco have received almost $3 million in funding through the ACA's initiative to support Nurse Managed Health Clinics, which seek to enhance service availability for high risk populations.	Ongoing

	Program or Initiative	Funding and/or Oversight	Initiative/ Building Block	Description	Time Period
19	Health Care Innovations Challenge Grant[37]	CMS	Workforce, General Health Delivery System Innovation	These grant funds are being used to further strategies for new delivery models, IT infrastructure, data support, infrastructure support, development of collaborative partnerships, development of health care workers including interdisciplinary core competency standards for training programs, and new payment and reimbursement models. Among the 2012 awardees, 10 are operating their efforts only within California, while another 7 will be implementing models in multiple states including California. The programs operating solely in California received over $79 million in funding and are projected to save over $148 million over three years.	2012 - Ongoing
20	CalOHII Consent Demonstration[38]	Health Information Technology for Economic and Clinical Health (HITECH) Act	Health Information Technology (HIT)	CalOHII is currently administering three Demonstration Projects in San Diego, Santa Cruz, and the Inland Empire, all focused on evaluating various consent policies. All are in an evaluation test period.	2012 - Ongoing
21	Regional Extension Centers (RECs)[39]	Office of the National Coordinator (ONC)	HIT	Funded by ONC, RECs help providers through Electronic Health Record (EHR) adoption. Three RECs are supported in California: California's Health Information Partnership & Services Organization, CalOptima Regional Extension Center, and Health Information Technology Extension Center for Los Angeles County.	2010 – 2014
22	State HIE Cooperative Agreement Program (California)[40]	ONC, American Recovery and Reinvestment Act, 2009	HIT	The California Health and Human Services Agency was awarded a four-year, $38.8 million federal grant to encourage and fuel adoption of health information exchange throughout the state.	2010-2014
23	Advance Payment Accountable Care Organization Model[41]	CMS	General Health Delivery System Transformation	Selected physician-based and rural providers who voluntarily coordinate high quality care to Medicare patients receive upfront monthly payments to invest in infrastructure and staff for care coordination. These payments are an advance on the shared savings they are expected to earn. Two ACOs in this demonstration are located in California: Golden Life Healthcare, LLC, in Sacramento and National ACO in Beverly Hills.	2012 - Ongoing
24	Pioneer Accountable Care Organization (ACO) Model[42]	CMS	General Health Delivery System Transformation	This demonstration was designed by CMS to support organizations with experience as ACOs or similar arrangements in providing more coordinated care to enrollees at a lower cost to Medicare. During the first two years of the demonstration, the ACO Pioneer Model tests a	2012 - Ongoing

	Program or Initiative	Funding and/or Oversight	Initiative/ Building Block	Description	Time Period
				shared savings and shared losses payment arrangement with higher levels of reward and risk than in the Shared Savings Program. ACO Pioneers that show savings over the first two years will then be eligible to move to a population-based per-beneficiary per month payment model. Four ACOs, Brown & Toland Physicians, Heritage California ACO, Monarch Healthcare, and Sharp Healthcare, are currently participating in California.	
25	Medicare ACO-Shared Savings Program[43]	CMS	General Health Delivery System Transformation	This program facilitates coordination among providers to improve quality of care while reducing costs for Medicare fee-for-service enrollees. Eligible providers have the option to participate in the Shared Savings Program by either creating or participating in an ACO. 17 sites across California were participating in this program.	2011 - Ongoing
26	Community-Based Care Transitions Program (CCTP)[44]	CMS	General Health Delivery System Transformation	This demonstration tests models for improving care transitions from the hospital to other settings and reducing readmissions for high-risk Medicare enrollees. The goals of the CCTP are to improve transitions of enrollees from the inpatient hospital setting to other care settings, to improve quality of care, to reduce readmissions for high risk enrollees, and to document measurable savings to the Medicare program. Of the sites currently participating in the program, 11 are in California.	2011 – 2016

Table III.6b: Select State and Private Sector-Supported Initiatives in California Related to CalSIM Initiatives and Building Blocks

	Program or Initiative	Funding and/or Oversight	Initiative/ Building Block	Description	Time Period
1	California Maternal Quality Care Collaborative (CMQCC)[45]	Center for Disease Control, California HealthCare Foundation	Maternity	CMQCC's mission is to end preventable morbidity, mortality, and racial disparities in California maternity care through improved data collection and transformation of data into actionable information, increased communications and collaboration among stakeholders, and improved dissemination of best practices and quality improvement principles and techniques.	2004 - Ongoing
2	California Maternal Data Center (CMDC) Initiative[46]	Center for Disease Control, California HealthCare Foundation	Maternity	The CMDC is a statewide initiative where relevant information and performance metrics on maternity care services is collected, linked, analyzed, and reported back to hospitals in rapid-cycle time. The program is designed to facilitate hospital quality improvement activities and service-line management at low burden, low cost and high value for hospital participants. Currently, interested hospitals may join the program free of charge. The program aims to closely monitor maternal mortality, cesarean section utilization, and the rate of elective deliveries. As of October 2013, 44 hospitals are participating in CMDC.	Ongoing
3	eReferrals[47]	Mixed	HHCP, HIT	San Francisco's eReferral system is a web-based referral tool embedded in San Francisco General Hospital's EHR system that facilitates communication between primary care physicians and specialists. In 2013, UCLA and LA Care were working to replicate this system.	Ongoing
4	Center for Care Innovations (CCI) [48]	Blue Shield of California Foundation, The California Endowment, California HealthCare Foundation (CHCF), Metta Fund, and California Mental Health Services	HHCP	CCI supports multiple initiatives to strengthen the health care safety net. Their programs include efforts to disseminate innovative methods in care, develop new ideas to improve health care, connect safety net providers in information sharing networks, and further quality improvement initiatives. From 2011 to 2013, CCI's Health Home Innovation fund has provided $700,000 to eight regional efforts and developmental projects that aim to help safety-net institutions build integrated systems of care. Among its many safety-net related programs, CCI has established an Innovation Center for the Safety Net that supports safety-net hubs as they test and implement new models and products to improve care. The program	1999 - Ongoing

	Program or Initiative	Funding and/or Oversight	Initiative/ Building Block	Description	Time Period
		Authority		provides "innovation hubs" with $100,000 and technical assistance services to support their efforts. Most recently, CCI has partnered with the Institute for Healthcare Improvement (IHI) to build health homes for complex patients in nine primary care clinics in California.	
5	Healthy San Francisco[49]	Mixed, Local safety net	HHCP	Healthy San Francisco, a reinvention of the area's safety net, provides a Medical Home and primary physician to each program participant, allowing a greater focus on preventive care, as well as specialty care, urgent and emergency care, laboratory services, inpatient hospitalization, radiology, and pharmaceuticals.	2007 - Ongoing
6	California Quality Collaborative (CQC)[50]	Oversight: PBGH, CAPG Funding: Mixed, plans and foundations	HHCP	CQC is a health care improvement organization aimed at advancing the quality and efficiency of the health care delivery system in California. They generate scalable and measurable improvement in care delivery in ways important to patients, purchasers, providers, and health plans. CQC programming includes health care quality improvement training programs and topic-specific collaboratives.	2002 - Ongoing
7	Hospital programs delivering palliative care services[51]	Mixed, Health Systems	Palliative Care	A number of hospital systems across the state are engaged in efforts to deliver palliative care services and make advanced illness management accessible to patients. These efforts include those by Sutter Health, Sharp Healthcare, and the California Hospital Medical Center that are implementing various models of palliative care including targeted case management and home-based services.	Ongoing
8	Palliative Care Action Community (PCAC)[52]	CHCF	Palliative Care	PCAC is a learning collaborative that will support and strengthen participants' existing efforts to build effective, sustainable community-based palliative care (CBPC) services in the state. Participants have opportunities to share implementation strategies, experiences with different clinical models, and outcomes with peers who have a mutual vision of increasing access to quality CBPC.	2012 – 2014
9	Spreading Palliative Care in Public Hospitals[53]	CHCF	Palliative Care, Workforce	Grants were awarded to 17 public hospitals to develop new and sustainable palliative care programs. These programs focus on helping people with serious illnesses alleviate their pain, manage their symptoms, and improve their overall quality of life. This initiative also supports the expansion and enhancement of existing palliative care programs.	2008 – 2014
10	University of California San Francisco (UCSF)	UCSF	Palliative Care, Workforce	Palliative Care Leadership Centers provide intensive, operational training and mentoring for palliative care programs at different	2004 - Ongoing

	Program or Initiative	Funding and/or Oversight	Initiative/ Building Block	Description	Time Period
	Palliative Care Leadership Center[54]			stages of development.	
11	LA Regional Accountable Care Network[55]	Hollywood Presbyterian, White Memorial, Citrus Valley, AltaMed	HHCP, Palliative Care	This provider collaboration integrates public and private safety-net hospitals and one of the country's largest Federally Qualified Health Centers (FQHCs), AltaMed, which also contracts with private practice physicians.	Ongoing
12	Community Health Workers, Promotores, and the Triple Aim	Blue Shield of California Foundation	Workforce	This grant supports the investigation of the contributions of community health workers and Promotores (CHW/P) to reducing healthcare costs, improving patient experience, and improving health outcomes.	2012 - Ongoing
13	Specialty Care Safety Net Initiative (SCSNI)	California HealthCare Foundation	HHCP, HIT/HIE	The Specialty Care Safety Net Initiative (SCSNI) uses telemedicine to address the need for specialty care in the safety net. This initiative has affected 43 clinics statewide.	2010 - Ongoing
14	California Pay for Performance Program[56]	IHA	Payment Reform Innovation Incubator	This program is the largest non-governmental physician incentive program in the United States. It is managed by the Integrated Healthcare Association (IHA) on behalf of eight health plans representing 10 million insured persons. IHA is responsible for collecting data, deploying a common measure set, and reporting results for approximately 35,000 physicians in over 200 physician groups.	2001 - Ongoing
15	The Patient Assessment Survey[57]	Managed by Pacific Business Group on Health (PBGH)	Public Reporting	This survey, which measures patient-reported experiences at the medical group level, is publicly reported to help consumers choose physicians and medical groups. Health plans use these results as part of the HMO Pay-for-Performance program to make quality-based incentive payments to medical groups.	Ongoing
16	Patient Online Ratings of Physicians[58]	Managed by PBGH	Public Reporting	PBGH is working to create an online physician ranking platform to connect existing patient rating sites with surveys of patient experience.	Ongoing
17	California Healthcare Performance Information System[59]	Managed by PBGH	Claims Database	This database pools claims and other data sources from three major health plans in California and Medicare. The platform produces physician, medical group, and hospital performance ratings on quality, efficiency, and utilization measures.	Ongoing
18	Supporting Consumers' Decisions in the	Managed by PBGH	Public Reporting	PBGH has created resources that the exchanges can use to build their consumer choice decision support systems.	Ongoing

	Program or Initiative	Funding and/or Oversight	Initiative/ Building Block	Description	Time Period
	Exchange[60]				
19	In Home Operations Waiver[61]	DHCS	General Health Delivery System Transformation	The In Home Operations Waiver provided services such as case management, respite care, home health aides, and transitional case management to select individuals who met certain eligibility requirements.	2007 – 2009
20	Multipurpose Senior Services Program Waiver (MSSP)[62]	DHCS	General Health Delivery System Transformation	This program offers home and community-based services to Medi-Cal enrollees age 65 and over and disabled individuals as an alternative to nursing facility placement.	2009 - June 2014
21	CalPERS and Blue Shield of California Accountable Care Organizations[63]	Blue Shield of California	General Health Delivery System Transformation	Since 2010, Blue Shield, Dignity Health hospital system, and Hill Physicians Group have collaborated in an ACO pilot for CalPERS members to integrate care delivery and align payment incentives. Based on the success of a Sacramento County pilot in keeping premium costs flat in its first two years, Blue Shield is spreading the model to work with 20 ACOs statewide by 2015.	2010 - Ongoing

Table III.7 Health Information Exchanges in California, 2013

Appendix IV: Methodology for Financial Analysis

This appendix provides additional details about the methodology for conducting the financial analysis, the findings of which were described in Section V of the Innovation Plan. For each of the initiatives where savings were estimated (Maternity Care, Health Homes for Complex Patients, and Palliative Care), this appendix describes the derivation of total savings, including the estimation of the target population, engagement rate, and savings per member per year (PMPY).

Common to all of the initiatives was the need to estimate the number of individuals enrolled in Medicare, Medi-Cal, and commercial insurance between 2015 and 2017. The 2015 estimated number of beneficiaries, by region, under Medicare (including fee-for-service and Medicare Advantage) and Medi-Cal (including fee-for-service and managed care) is based on 2010 beneficiary counts trended forward by a weighted Medicare growth rate of 16.7 percent and non-Medicare growth rate of 1.36 percent over the 2010-2015 period.[64] This accounts for the reduction in uninsured and consequent shifts in coverage of the uninsured to Medi-Cal or other non-Medicare sources resulting from Medi-Cal eligibility expansion beginning in 2014. The National Health Expenditure Projections forecast a 46.1 percent increase in national Medicaid enrollment and 3.1 percent increase in other non-Medicare sources of coverage by 2015. Our estimates of the change expected in California indicate that Medi-Cal and other non-Medicare coverage enrollment will have increased by 34.9 and 5.7 percent of 2010 enrollment levels by 2015.[65] A variable percentage of in-scope beneficiaries who would participate or engage in the care plan adaptations suggested under the recommendation was applied to the projected number of annual enrollment under each type of coverage to derive total affected beneficiaries.

A. Maternity Care

Maternity care initiatives target births reimbursed by Medi-Cal and commercial insurance, and aim to reduce the number of unnecessary Cesarean sections over a three-year period.

Target Population

The target population is projected to be 350,739 births paid by Medi-Cal, and 258,972 births covered through commercial insurance in 2015. This estimate is based on 2009 birth rate data from the California Maternal Quality Care Collaborative (CMQCC),[66] which were trended forward to 2010 to derive birth rate data for the Medi-Cal and commercial insurance populations. The estimate of 2015 births uses the 2010 birth rates applied to 2015 enrollment estimates for both populations.

Engagement Rate

Because there are a number of different initiatives included in the Maternity Care initiative, the engagement rate is defined as the percent of the pregnant population whose care is impacted by one or more of the maternity care initiatives. Among the Medi-Cal population, we anticipate a high engagement rate because the state has the authority to enact policy changes affecting all Medicaid providers. It is more difficult to estimate engagement rates among the commercially insured, as implementation of the initiative will depend on commercial payers' buy-in. Of the three maternity care initiatives, reducing elective deliveries has been responsive to intervention, while the remaining two – reducing Cesareans and increasing vaginal births after Cesareans – have been more difficult to move in states that have tried to influence them.[67]

Savings Per Member Per Year

This section describes the methodology for estimating savings from the maternity care initiatives less implementation costs.

Cost to Implement. Maternity care initiatives can be readily implemented but would require a robust process for engaging stakeholders. Reduced payment for non-medically necessary Cesarean sections and early elective deliveries, and bundled payment structures would require modifications to Medi-Cal and commercial payer claims systems, but these costs would be small relative to potential savings. Additional costs to report Pay for Performance data would be minimal as the systems to do this already exist.

Estimated Savings. Maternity savings depend on the engagement rate, percentage reduction in Cesarean sections and reduction in early elective deliveries. To calculate the price difference between Cesarean and vaginal births the following equation is used:

Calculating Savings from Reduction in Cesarean Sections

[Total Savings] = [Births] * [Percent reduction in Cesarean births] *

[Price difference vaginal versus Cesarean birth] * [Engagement rate]

The CMQCC study reported the following average costs for Cesarean and vaginal deliveries (**Table IV.1**).

Table IV.1: Average Costs for Vaginal and Cesarean Deliveries - 2009[68]

	Cesarean Birth	Vaginal Birth
Commercial, Facility	$14,700	$8,500
Commercial, Professional	$4,100	$3,000
Total	$18,800	$11,500
Medi-Cal, Facility	$5,940	$3,320
Medi-Cal, Professional	$1,511	$1,270
Total	$7,451	$4,590

Based on these data, the cost difference between vaginal and Cesarean deliveries during 2010 was $2,681 for Medi-Cal, and $7,300 for commercial insurance.

Savings achieved through the maternity care initiatives depend on the degree of reduction in the number of Cesareans deliveries. The analysis assumed reductions of 5 to 10 percent in the Cesarean rate. The assumption appears reasonable given that several studies estimate between 8-18 percent of Cesarean births are not medically necessary.[69,70]

CMQCC reports that, in 2009 there were a total of 166,924 vaginal births and 79,515 Cesarean sections to women with Medi-Cal, and 160,749 vaginal births and 82,706 Cesarean sections to women with commercial insurance.[71] These figures were trended forward to 2010 using Census data, for a total of 168,494 vaginal births and 80,263 Cesarean sections to women with Medi-Cal, and 162,261 vaginal births and 83,484 Cesarean sections to women with commercial insurance.

Using the CMQCC data, a 5 percent reduction in Cesareans would result in 2010 savings of $11,500,000 for the Medi-Cal population and $30,500,000 for the commercially insured; a 10 percent reduction would result in savings of $23,000,000 for the Medi-Cal population and $61,000,000 for the commercially insured.

Estimated 2010 savings were divided by the total number Medi-Cal enrollees and commercially insured to estimate savings PMPY, then trended forward based on national forecasts of health expenditure growth from the CMS Office of the Actuary.[72] Each PMPY was then adjusted for regional differences, and calculated based on a reduction of Cesareans of 5 percent and 10 percent (**Table IV.2**). The regional adjustment reflects regional per member per year savings trended forward for coverage expansions and health care inflation.[73]

Calculating Savings from Reduction in Early Elective Deliveries

Savings from the reduction in early elective deliveries are primarily driven by the reduction in deliveries resulting in a NICU stay. For both commercial and Medi-Cal, the number of early elective deliveries with a NICU stay was estimated by gestational age using parameters from a large multi-hospital study. [74]

[deliveries] * [% planned elective] * [% with NICU stay] =
[planned elective deliveries w/NICU]

To estimate future savings, the number of planned elective deliveries with a NICU stay was calculated assuming 5 percent and 10 percent reductions in the number of planned early elective deliveries. The difference in the number of planned early elective deliveries resulting in a NICU stay was converted to dollars using the difference between births with and without NICU stays. This can be described by the equation below.

[current planned elective deliveries w/NICU] - [future planned elective deliveries w/NICU] =
[change in early elective deliveries to NICU] * [cost difference, births w/NICU stay vs those without] = [savings]

Savings are then converted to a PMPY factor and added to savings resulting from reduced Cesareans. This is then trended forward and adjusted for regional differences. Total PMPY savings can be found in **Table VI.2**.

Table IV.2: Estimated PMPY Savings, 2015 - 2017, by Region

	2015		2016		2017	
	Medi-Cal	Comm	Medi-Cal	Comm	Medi-Cal	Comm
PMPY Growth by Region, 5% Cesarean Reduction, 5% Reduction in Early Elective Deliveries w/ NICU Stay						
Bay Area / Sacramento	$2.65	$3.24	$2.76	$3.41	$2.92	$3.56
Central Valley / Central Coast / North	$2.42	$2.84	$2.52	$2.99	$2.67	$3.12
Inland Empire	$2.50	$2.33	$2.61	$2.45	$2.76	$2.56
Los Angeles	$2.40	$2.39	$2.51	$2.52	$2.65	$2.63
Orange County / San Diego	$2.41	$2.67	$2.51	$2.81	$2.66	$2.93
PMPY Growth by Region, 10% Cesarean Reduction, 10% Reduction in Early Elective Deliveries w/ NICU Stay						

Bay Area / Sacramento	$5.29	$6.47	$5.53	$6.81	$5.85	$7.10
Central Valley / Central Coast / North	$4.84	$5.68	$5.05	$5.97	$5.34	$6.23
Inland Empire	$5.00	$4.66	$5.23	$4.90	$5.53	$5.12
Los Angeles	$4.80	$4.78	$5.02	$5.03	$5.31	$5.25
Orange County / San Diego	$4.81	$5.34	$5.03	$5.61	$5.32	$5.86

To calculate overall savings, PMPY estimates were multiplied by the projected number of beneficiaries in each region for 2015-2017 and by expected engagement rates. Due to uncertainty regarding engagement rates, **Table VII.3** estimates savings under two different engagement rate scenarios.

Table IV.3: Estimated Savings from Reduction in Cesarean Sections and Early Elective Deliveries with a NICU Stay, 2015 – 2017

Engage-ment	Year	5% Reduction		10% Reduction		Total @ 5% Reduction	Total @ 10% Reduction
		Medi-Cal	Commercial	Medi-Cal	Commercial		
90% / 3%	2015	$19.6M	$1.5M	$39.1M	$3.0M	$21.1M	$42.1M
90% / 8%	2016	$20.5M	$4.2M	$41.1M	$8.4M	$24.7M	$49.4M
90% / 15%	2017	$21.8M	$8.2M	$43.6M	$16.4M	$30.0M	$60.0M
Total		**$61.9M**	**$13.9M**	**$123.8M**	**$27.8M**	**$75.8M**	**$151.5M**
90% / 4%	2015	$19.6M	$2.0M	$39.1M	$4.0M	$21.6M	$43.1M
90% /10%	2016	$20.5M	$5.2M	$41.1M	$10.4M	$25.8M	$51.5M
90% / 20%	2017	$21.8M	$11.0M	$43.6M	$21.9M	$32.8M	$65.5M
Total		**$61.9M**	**$18.2M**	**$123.8M**	**$36.3M**	**$80.2M**	**$160.1M**

B. Health Homes for Complex Patients

Increased participation in Health Homes for Complex Patients has the potential to significantly improve health outcomes for many Californians, while reducing the overall cost of care. The initiative to expand Health Homes for Complex Patients may reduce expenditures for the Medicare, Medi-Cal, and commercially insured populations over a three year period, although the magnitude of these savings will largely depend on the engagement rate of the target population into fully functional Health Homes for Complex Patients.

Target Population

The method for identifying complex patients reflect criteria employed by studies of three distinct coverage groups: Medicare, Medi-Cal, and Commercial (individuals with Medicare and Medi-Cal are classified as Medicare enrollees). The selected sources contain slightly different definitions for complex patients; however all are defined as persons having multiple chronic conditions.

Medicare. The target population was identified using the CMS's Chronic Conditions Data Warehouse, which presents summary information on the prevalence of chronic conditions among Medicare beneficiaries by state. To be considered part of the target population, a beneficiary must have four or more of chronic conditions including: asthma, diabetes, heart disease, mental health conditions, substance abuse disorders, and being overweight (defined as a

body mass index over 25). Four chronic conditions were selected as the threshold for inclusion because within this data source, selecting a lower number of chronic conditions provided too large a set of potential beneficiaries due to the high prevalence of certain conditions such as hypertension. Using four conditions as the minimum threshold, the target population includes 34 percent of California Medicare beneficiaries and 77 percent of expenditures.[75]

Medi-Cal (Medicaid). The target population was identified using a Lewin Health Home analysis of 2008 Medicaid claims data from CMS's Chronic Conditions Data Warehouse. The Health Home analysis defined potential enrollees as individuals who meet one of the following criteria: (1) have at least two chronic conditions, (2) have one chronic condition and be at risk for another, or (3) have one serious and persistent mental health condition (SPMI). Using these criteria, the analysis found that 10.5 percent of Medi-Cal beneficiaries would be eligible for Health Homes for Complex Patients (38 percent of SSI population, 7 percent of TANF population).[76] For persons eligible for both Medi-Cal and Medicare, 26 percent would qualify.

Commercial. Among individuals with commercial insurance, nine percent of adults 18-64 in California have multiple chronic conditions including heart disease, diabetes, hypertension, COPD, or asthma.[77] To account for children covered by commercial plans, we estimated that nine percent would be part of the target group and weighted the percentage of eligible adults by the distribution of insured children. This resulted in approximately 7 percent of all commercially insured individuals potentially eligible for Health Homes for Complex Patients.[78] This population consumes roughly 45 percent of commercial health expenditures.

Engagement Rate

There are several factors that will determine the rate of engagement, including: the extent to which payers agree to participate in funding health homes; the extent to which providers and patients participate; the speed of implementing health homes, and the extent to which providers employ the most effective, best practices. In estimating the impact of health homes, the baseline must account for the approximately 50% of Californians who are currently served by well-integrated providers. These providers are already achieving savings that will show up as part of the baseline.[79] Integrated providers are highly concentrated in urban areas and less prevalent in rural areas. This limits the potential for additional integration in urban areas and suggests that establishing more integrated practices in rural areas will be difficult and require more time and creative solutions. Given the significant baseline, this analysis applies a conservative incremental engagement rate of 3-4 percent in year 1 rising to 15-20 percent by year 3. A study by the Berkeley Forum estimates that out of the population of individuals with at least one chronic condition, the engagement rates in Health Homes for Complex Patients will reach 65 percent by 2015.[80] The Berkeley estimate is higher than this analysis with the year 1 projection of 3-4 percent incremental engagement on a baseline of 50 percent.

Savings Per Member Per Year

Cost to Implement. The cost to implement Health Homes for Complex Patients varies widely in the literature, ranging from $73 PMPY to $1,744 PMPY.[81, 82] The following table summarizes cost data available from each study, although as the table shows, cost data are not available for all studies.

Table IV.4: Implementation Cost for Health Homes

Study	Program	PMPY Cost	Notes

Study	Program	PMPY Cost	Notes
Dorr[83]	Multi-disease care management program for seniors in Utah	N/A	
Grumbach[84]	Health Home program in Colorado	N/A	
Leff[85]	Guided care intervention in Maryland	$1,744	Reflects cost to hire additional nurses to lead guided care efforts
McCall[86]	Medicare Care Management Program for High Cost Beneficiaries in Bronx and Westchester County, NY	$1,440	
Cosway[87]	Medical Home program in North Carolina	N/A	
Reid[88]	Group Health Cooperative in Puget Sound, WA	N/A	
Rosenberg[89]	Pilot program in Pittsburgh	$73	Includes annual salary and benefits of six practice-based care managers, and the cost of the staff's effort to manage the program

It is important to note that many of these studies analyzed health homes implemented in integrated delivery systems that had significant infrastructure in place prior to the study. For example, Intermountain Healthcare[90] has long had an Electronic Health Records system, and the University of Pittsburgh[91] and Johns Hopkins[92] are among the most sophisticated hospitals in the country. Other programs may incur higher startup costs than these.

Estimated Per Capita Savings. The literature provides widely varying estimates of per-capita savings for those in health homes compared to usual care, with some studies showing savings and others not.[93,94] This variance likely relates to the design of health homes and provides another reason to use a conservative approach in estimating savings. Savings estimates used in this analysis are derived from six studies shown below. The studies were selected because of similarities with the initiative proposed in the Innovation Plan.

Table IV. 5. below shows savings representing a 2 – 6 percent reduction in medical expense per member per year, which is reasonable given the focus on chronic conditions and known gaps in care coordination.

Table IV.5: Savings Estimates from Literature for Health Homes

Payer	Study	Savings PMPY	# Engaged	Notes
Medicare	Dorr (2009)	$640	1,144	Medicare enrollees with chronic conditions. Savings measured relative to controls 1 and 2 years post enrollment. Intermountain Health Care, UT
	Leff (2009)	$1,363	433	Mostly Medicare enrollees with chronic conditions. Savings measured 1 year post enrollment. Randomized to usual care or intervention. Johns Hopkins, MD
	Midpoint	**$1,000**		

Payer	Study	Savings PMPY	# Engaged	Notes
Medicaid	Morrato (2010)	$149	286,000	Medicaid/CBHP children. Gross savings reported over 1 year period relative to controls. Higher savings in children with chronic disease. Net savings estimated. Colorado Medicaid
	Milliman (2011)	$194	223,102	Medicaid adults and children. Net savings reported over 4 years and increased over time. Used average savings over entire period. Enrollment voluntary but results adjusted for risk and cross validated. North Carolina Medicaid
	Midpoint	**$172**		
Commercial	Reid (2010)	$46	7,108	Mixed population in prototype clinic. Gross savings versus controls over two year period. Estimated costs from Rosenberg (2012). Group Health Cooperative of Puget Sound
	Rosenberg (2012)	$107	23,900	Mixed but mostly commercial population. Voluntary participation by clinics. Univ. of Pittsburg Medical Center
	Midpoint	**$77**		

For persons eligible for both Medicare and Medi-Cal, Medi-Cal savings per member were estimated at 4 percent of Medi-Cal expenditures to be consistent with other estimates of savings. Long term intuitional care costs were excluded from this calculation because health homes are unlikely to reduce those expenditures. Medicare related savings are reflected in the PMPY estimates in Table IV.5.

Projected Savings. Total savings were calculated by multiplying the per-capita savings by the target population, engagement rate. The following table shows the range of potential savings from the initiative based on our definition of the target population, estimates of engagement rates, and per-capita savings..

Table IV.6: Projected Savings from Health Homes Initiatives

Engagement	Year	Medicare	Medi-Cal	Other	Total
3%	1	$104M	$12M	$4M	$120M
8%	2	$294M	$35M	$11M	$340M
15%	3	$588M	$70M	$21M	$680M
	Total	**$986M**	**$118M**	**$36M**	**$1,140M**
4%	1	$139M	$16M	$5M	$160M
10%	2	$367M	$44M	$14M	$424M
20%	3	$784M	$94M	$28M	$907M
	Total	**$1,290M**	**$154M**	**$47M**	**$1,491M**

C. Palliative Care

A significant share of healthcare spending is devoted towards inpatient care for patients facing serious or life-threatening illness.[95] An abundance of recent evidence suggests that an expansion of patient and family-centered palliative care has the potential to change health outcomes for many Californians, while reducing costs associated with inpatient care.[96, 97] The magnitude of potential savings will largely depend on the effectiveness of encouraging the provision of

palliative care among providers, as well as the engagement rate of such services among eligible beneficiaries.

Target Population

While the Palliative Care initiative target population focuses on the highest risk patients within a health home for complex patients, literature to date focuses on savings resulting from inpatient hospital discharge patients for whom palliative care appears likely to be appropriate. Morrison et al. estimate that between 2 and 6 percent of total inpatient discharges could be appropriate for palliative care services.[98] Potential savings are calculated as the number of discharges appropriate for palliative care multiplied by reduced expenditures per discharge.

Engagement Rate

The engagement rate is the incremental percentage of eligible Medicare and Medi-Cal beneficiaries participating in palliative care. Anticipated voluntary uptake of palliative care initiatives is unclear, particularly considering that views on palliative care and end-of-life vary widely across cultures, between healthcare settings, and among patients and their families. Successful engagement will include steps to encourage providers to use palliative treatment more frequently and increased educational efforts with patients. To be conservative, this analysis assumes a 3-4 percent incremental engagement in year 1 growing to 15-20 percent by year 3.

Savings Per Member Per Year

Several studies have developed saving-per-discharge estimates for palliative care services and have noted savings for both patients who were discharged alive from the hospital versus those who died while in the hospital. While both groups received palliative care, those who expired in the hospital showed significantly higher savings **(Table IV.7).** Usual care hospital stays ending in death are estimated to cost $76,000 per discharge and reflect a particularly high intensity of care while providing little additional quality of life.

Table IV.7: Savings per Discharge

	Discharged Alive	Died in Hospital
Morrison et al. (2011)[99]	$4,098	$7,563
Witford et al. (2013)[100]	$1,998	$24,720
Foubister (2009)[101]	$1,696	$4,908
Average	***$2,597***	***$7,563***

Implementation and Service Costs. When evaluating the merits of palliative care programs and services, it is necessary to abstract and compare the same costs in treatment under both a palliative care environment and the status quo. Typically, direct costs of care are costs that can be directly attributed to medications, procedures, or services. Indirect costs include the infrastructure costs of running a medical facility that are not directly related to a service or test.[102] The total, or comprehensive cost, is the sum of the direct and indirect costs.

According to the Center to Advance Palliative Care, one major cost of implementing and operating a palliative care program is staffing.[103] Program administrators will need to determine how many FTEs are needed based on the projected daily census. Roles within the palliative care

team may include the following: Physician Medical Director (MD), Advanced Practice Nurse (Nurse Practitioner), Program Coordinator (RN), Social Worker (MSW), Chaplain, Clinical Pharmacist, among others. This staff model assumes that beds and staff for the unit already exist and staffing costs for the palliative care unit are already built into the hospital's staffing plan. Staff and beds designated for palliative care can easily be used for other purposes if there is no need for palliative care at any given period. Another potential direct cost of implementation is the potential need for enhanced training programs to support the program.[104]

Projected Total Savings. Total savings for the Enhanced Palliative Care Initiative can be described by the following equation.

[Total Savings] = [Discharges eligible for palliative care] *([Percentage discharged alive] * [Cost difference, discharged alive] + [Percentage discharged expired] * [Cost difference, discharged expired])

Total savings for 2010 were then converted to savings per member per year (PMPY) by dividing by the number of beneficiaries, trending forward to account for changing prices and multiplying by estimated future enrollment and the percentage of beneficiaries likely to engage.

Based on our definition of the target population, estimates of engagement rates, and per member per year savings from the literature, the following table shows the savings potential for enhanced adoption of palliative care over the three-year period, assuming an incremental annual increase in participation. These estimates indicate that savings over the period may range from $87 million to $190 million across Medicare and Medi-Cal ***(Table IV.8).*** (There appear to be few studies of palliative care for commercial populations.)

Table VII.8: Expanded Palliative Care Net Savings

Engagement	Year	Medicare	Medi-Cal	Total
3%	1	$13 M	$2 M	$15 M
8%	2	$37 M	$6 M	$43 M
15%	3	$75 M	$12 M	$87 M
	Total	**$126 M**	**$20 M**	**$145 M**
4%	1	$18 M	$3 M	$20 M
10%	2	$47 M	$7 M	$54 M
20%	3	$100 M	$17 M	$116 M
	Total	**$164 M**	**$26 M**	**$190 M**

Total savings over the three-year period for the state's palliative care initiatives were derived by applying evidence of per-member-per-year (PMPY) savings to inpatient discharges, found in peer-reviewed literature, to the number of projected Medicare and Medi-Cal discharges per beneficiary and the proportion of these beneficiaries that is expected to engage or participate in the initiative.

Published estimates indicate that between 2 and 6 percent of inpatient discharges are potentially eligible for palliative care. For purposes of this analysis, it was assumed 6 percent of Medicare discharges and 2 percent of Medicaid discharges were eligible for palliative care. Morrison et al and Foubister estimate that approximately 40 percent of patients receiving palliative care are discharged alive.[105]

Total savings were computed by multiplying the number of discharges potentially eligible for palliative care by the change in expenditures relative to usual care shown in **Table IV.9** below, weighting by the percentage likely to be discharged alive versus expired. Total savings were converted to savings per-member-per-year (PMPY) savings by dividing by the respective membership counts.

Table IV.9: California Palliative Care Savings per Member per Year

	2010 Discharges	In-Scope Discharges	Savings Per Discharge, Alive	Savings Per Decedent	Total Savings	Members	Savings PMPY
Medicare	1,304,219	52,169	$2,597	$7,563	$236,393,858	6,398,970	$36.9
Medi-Cal	844,522	33,781	$2,597	$7,563	$87,740,206	7,397,966	$11.9

The PMPY estimate was then adjusted for regional differences in expenditures, trended forward to account for price inflation, and multiplied by estimated membership in years 1 to 3. The regional adjustment was made by computing an index that divides the regional cost per beneficiary found in **Table IV.9** by the statewide total cost per beneficiary for each payer. The statewide PMPY is then multiplied by this index to create region specific PMPYs. The PMPYs are also adjusted by forecasted national growth in expenditures from the CMS Office of the Actuary.

Appendix V: Evaluation and Accountability Plan

This section of the State Health Care Innovation Plan (Innovation Plan) describes California's preliminary approach for evaluating progress toward the proposed payment and delivery system Initiatives and Building Blocks, including the criteria and potential data sources.

Accountability Process

As described previously, accountability is key to both the Innovation Plan's short-term success and the state's efforts over the long-term to achieve the ten-year cost targets; therefore, a robust accountability process is built into the design of the Innovation Plan. The process involves establishing both statewide and regional performance measures, which will be compiled into a public report and monitored through a public process. Initially, the five regions for which metrics will be assessed are: Bay Area/Sacramento; Central Valley/Central Coast/North; Inland Empire; Los Angeles; and Orange County/San Diego. For definitions of these regions, please see the Market Assessment companion document**. These regions will be refined over time.**

The Secretary of Health and Human Services, along with other state leaders (e.g., CalPERS, Covered California, the Department of Health Care Service) select large employers, and commercial payers, will host annual public meetings at a regional level to assess progress on a variety of metrics. Local providers, plans, payers, and others, as well as local employers and elected officials will be invited to attend. These meetings will enable the state to take into consideration regional variations in cost, prices, level of clinical integration, income and uninsured rates, among other issues when reviewing progress on the metrics. At the same time, the meetings will shine a spotlight on early successes and enable them to be spread, while also identifying those areas where improvements are needed.

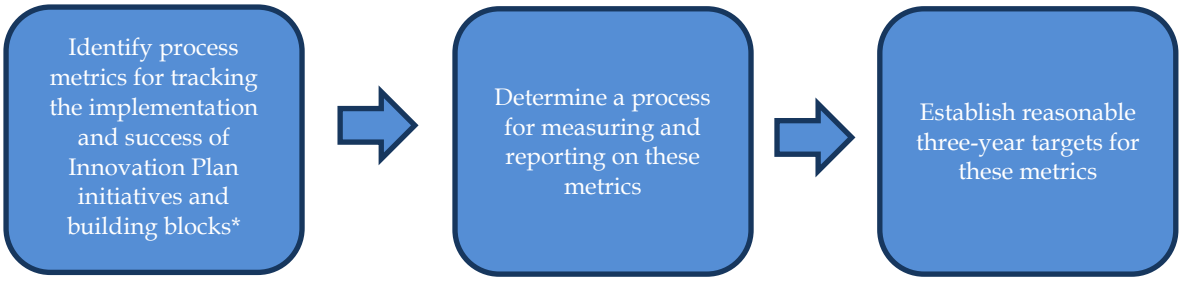
In addition to the regional meetings, the LGHC Task Force will reconvene once a year to assess overall statewide progress on the LGHC indicators and other metrics.

Evaluation Criteria

The evaluation approach is grounded in the measurement framework established in the Let's Get Healthy California report. The initiatives proposed in the Innovation Plan are designed to contribute to the Let's Get Healthy California (LGHC) Task Force 10-year plan; however it is important to note that the LGHC indicators will be affected by activities beyond the Innovation Plan, and changes in performance cannot be solely attributable to Innovation Plan initiatives.

Therefore, the state plans to augment the evaluation with additional metrics that are specific to measuring the implementation and success of Innovation Plan initiatives and building blocks. **Figure V.1** displays the process for developing and implementing these metrics; potential examples may be found in **Table V.1**.

Figure V.1: Process for Developing and Implementing Innovation Plan Indicators and Dashboard



**NOTE: LGHC Indicators relating to the initiatives and building blocks have been identified in the Innovation Plan*

To support monitoring and evaluation efforts, the California Health and Human Services Agency (CHHS) will maintain two performance dashboards. The first is the **Overall LGHC Dashboard**, a tool used to measure the health and health care of California. This will be publicly available through a state website.

The second Dashboard, the **Innovation Plan Dashboard**, will track the implementation process and the specific outcomes of the proposed payment and delivery system initiatives and building blocks. This dashboard will highlight information specific to the Innovation Plan, such as the development and implementation of payment incentives, the spread of health homes for complex patients, and the number of health homes with trained palliative care staff.

Data Sources and Collection Methods

California has a significant data infrastructure already in place, which will be employed to evaluate progress towards LGHC goals. The cost and quality reporting system will be the primary source of utilization, cost, and performance data. In the interim, the state will utilize several existing information systems to provide data necessary for monitoring and evaluating performance. This decentralized approach, which relies on multiple data sources to evaluate performance, may present challenges related to data consistency, timeliness, quality, and costs. However, these challenges will diminish with the establishment of a statewide cost and quality reporting system, which will provide consistent and reliable data and metrics across payers and providers.

Evaluating Innovation Plan initiatives will require data reflecting not only cost and quality metrics, but also the progress and penetration of care delivery systems such as Accountable Care Organizations, managed care organizations, and Health Homes for Complex Patients. In order to assist California in efforts to continue to improve and expand data collection efforts, particularly those needed to evaluate the Innovation Plan and LGHC, the state along with the Integrated Healthcare Association (IHA) and other interested groups will develop a process to review all data sources, their characteristics, services and populations covered, and any gaps. The review process will encompass frequency of data submission, production, and quality and validation checks.

Finally, the evaluators will explore methods to assess health outcomes related to the various initiatives, including tracking a randomly selected number of individuals enrolled, individuals who have received services from a particular initiative, or employing a control group for comparison.

These efforts, building on the strong data collection and measurement activities already in place, will ensure a robust and accurate evaluation.

Assessing the Impact of Innovation Plan Initiatives

California has selected four initiatives for the Innovation Plan —Maternity Care, Health Homes for Complex Patients, Palliative Care, and Accountable Care Communities. **Table V.1** begins to identify potential measures the state will employ to assess the impact of each initiative. These initiatives are not mutually exclusive; rather they support and amplify each other. The state will be able to determine changes in utilization and expenditures and the degree to which actual costs depart from projected trends; but, in some cases, it will not be possible to completely isolate the impact of each initiative. Individual process measures, however, will enable the State and stakeholders to track progress regarding the health homes for complex patients, maternity, palliative care, and accountable care community initiatives.

Evaluation Responsibility

The state will undertake a process to identify the specific agency(ies) or entity(ies) that will conduct the Innovation Plan evaluation. A number of agencies, including the California Department of Public Health (CDPH), the California Department of Health Care Services (DHCS), the Office of Statewide Health Planning and Development (OSHPD), and the Integrated Healthcare Association (IHA) can be expected to play significant roles in the evaluation process, as they already collect and analyze data for the state. Besides tracking results, these agencies will be responsible to assess the quality and completeness of the information. The value of the information will be enhanced if they are able to collaborate and share relevant information among stakeholders to enhance understanding of the progress being made.

Table V.1: Sample Metrics for the Innovation Plan Dashboard

Measure	Source	Pre-Innovation Plan	Post	Change	Remarks
Maternity Care					
Early Elected Deliveries Measure	CMQCC				
Cesarean Section Rate for Low-Risk Births	CMQCC				
Vaginal Birth After Cesarean Section (VBAC) Delivery Rate	CMQCC				
Unexpected Newborn Complications in Full-Term Babies	CMQCC				
Cost of delivery by type of delivery	CMQCC				

Measure	Source	Pre-Innovation Plan	Post	Change	Remarks
and by payer type					
Percent of hospitals reporting data in a timely manner to CMQCC	CMQCC				
Health Homes for Complex Patients (HHCP)					
Number of practices recognized as HHCP, number of participating providers	*TBD*				
Number of practices that incorporate frontline workers and allied health professionals, notably Community Health Workers	*TBD*				
Number of consumers with chronic conditions enrolled in HHCPs	*TBD*				
Percent of health plans developing innovative incentives for health homes	*TBD*				
Preventable Hospitalizations, per 100,000 population	OSHPD				
Clinical Outcomes	*TBD*				
Consumer experience	*TBD*				
Cost of implementation of a HHCP	*TBD*				
ROI/avoided costs for a HHCP	*TBD*				
Palliative Care					
Number of health care providers (by type of provider, e.g. nurse, physician, CHW, etc.) with palliative care training	*TBD*				
Number of HHCP with staff trained in palliative care services	*TBD*				
Number of discharges from hospital who had palliative care services, cost per discharge	OSHPD				
Consumer/caregiver/family experience	*TBD*				
Accountable Care Community					
Number of partnering organizations and participating providers	*Local ACC*				
Number of frontline and allied workers engaged, including Community Health Workers engaged in ACCs	*Local ACC*				

Measure	Source	Pre-Innovation Plan	Post	Change	Remarks
Number of persons with the targeted chronic condition participating in the ACC intervention	*Local ACC*				
Development of "impact equation" for assessing ROI, condition specific savings	*Local ACC*				
Establishment and governance of wellness trust and approach for sustainability	*Local ACC*				

Appendix VI: Roadmap for Health System Transformation

Figures VI.1 through VI.11 provide a roadmap for how California will move from today's health care system to that envisioned in the Innovation Plan, summarizing the key activities for each initiative and building block as well as methods for assuring accountability. The figures include any required federal waivers or state plan amendments (SPAs) that need to be completed/approved. As described in the Innovation Plan, the majority of initiatives proposed build off of existing innovations and activities underway in California and can be implemented without significant changes in legislation or regulation.

Figure VI.1 Key Activities for Maternity Care Initiative

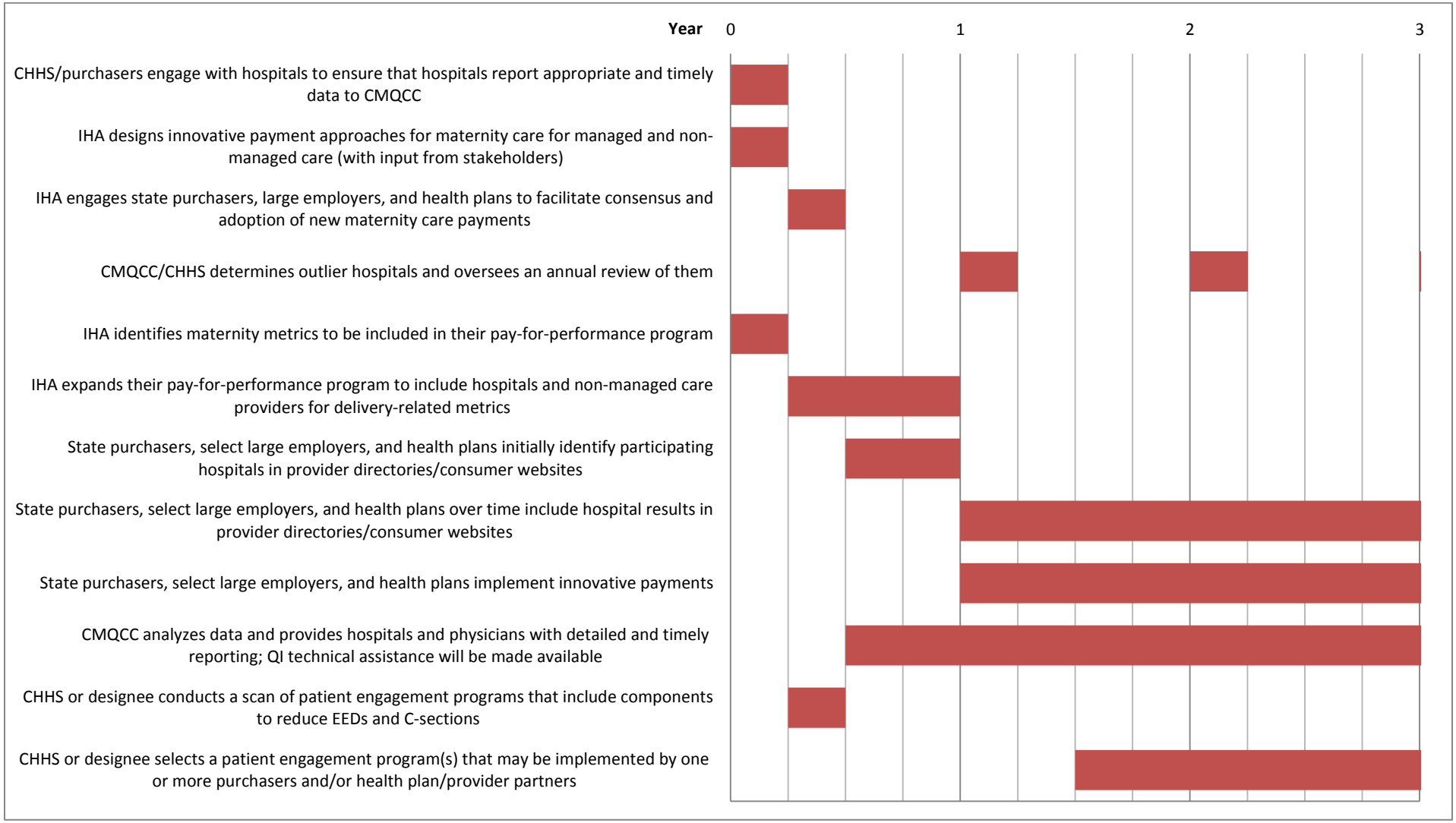


Figure VI.2 Key Activities for Health Homes for Complex Patients (HHCP) Initiative

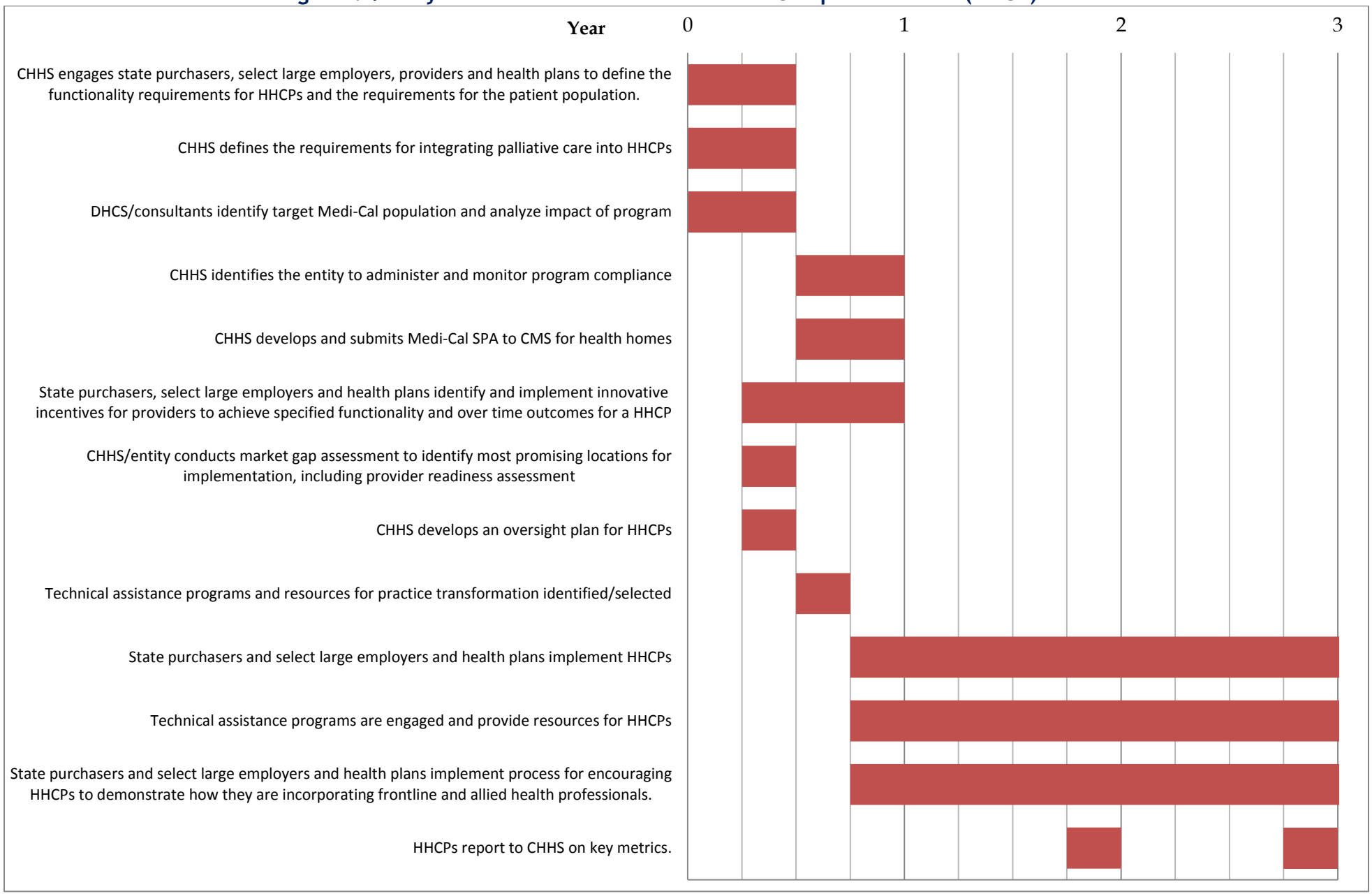


Figure VI.3 Key Activities for Palliative Care Initiative

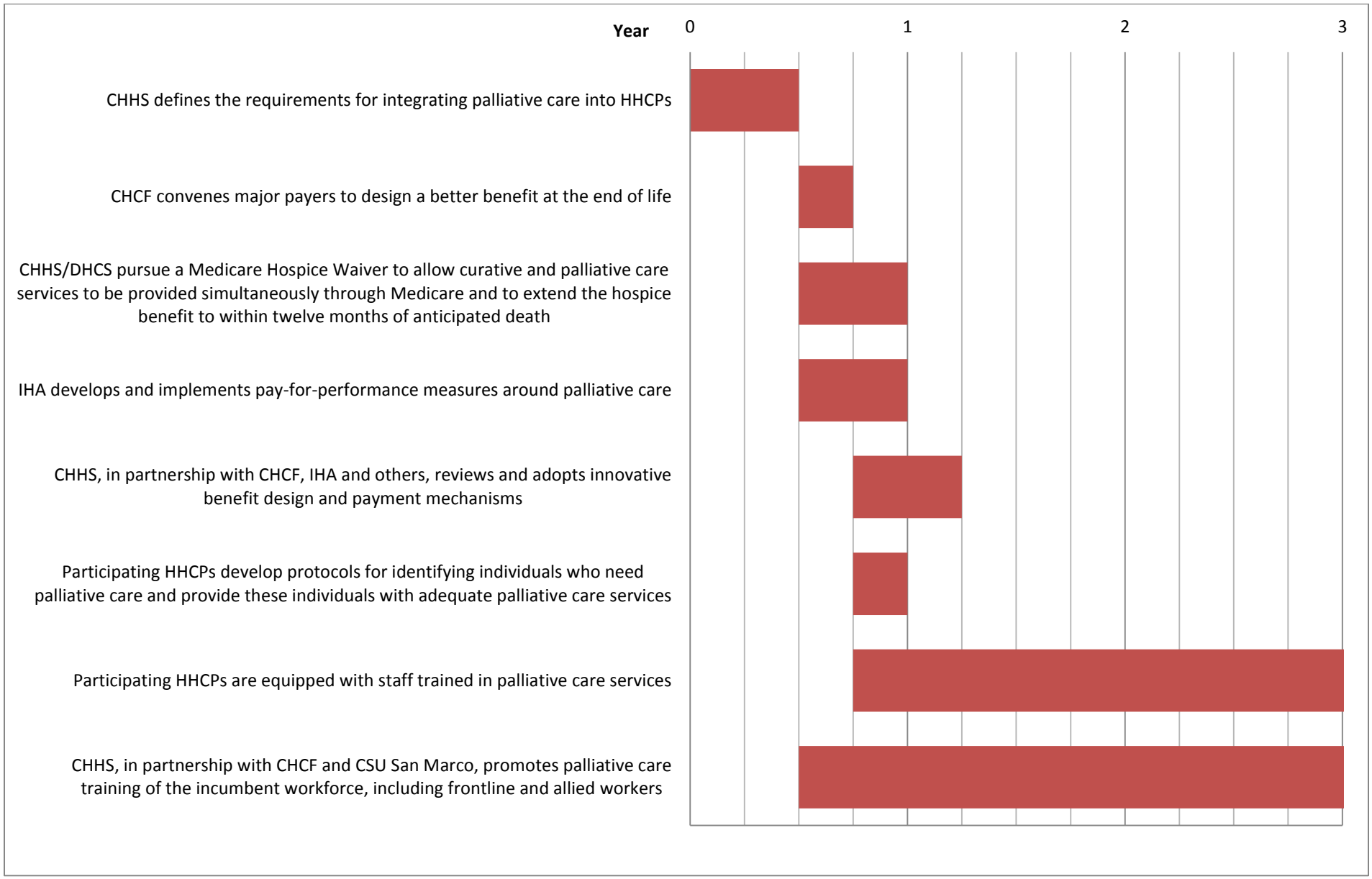


Figure VI.4 Key Activities for Accountable Care Communities Initiative

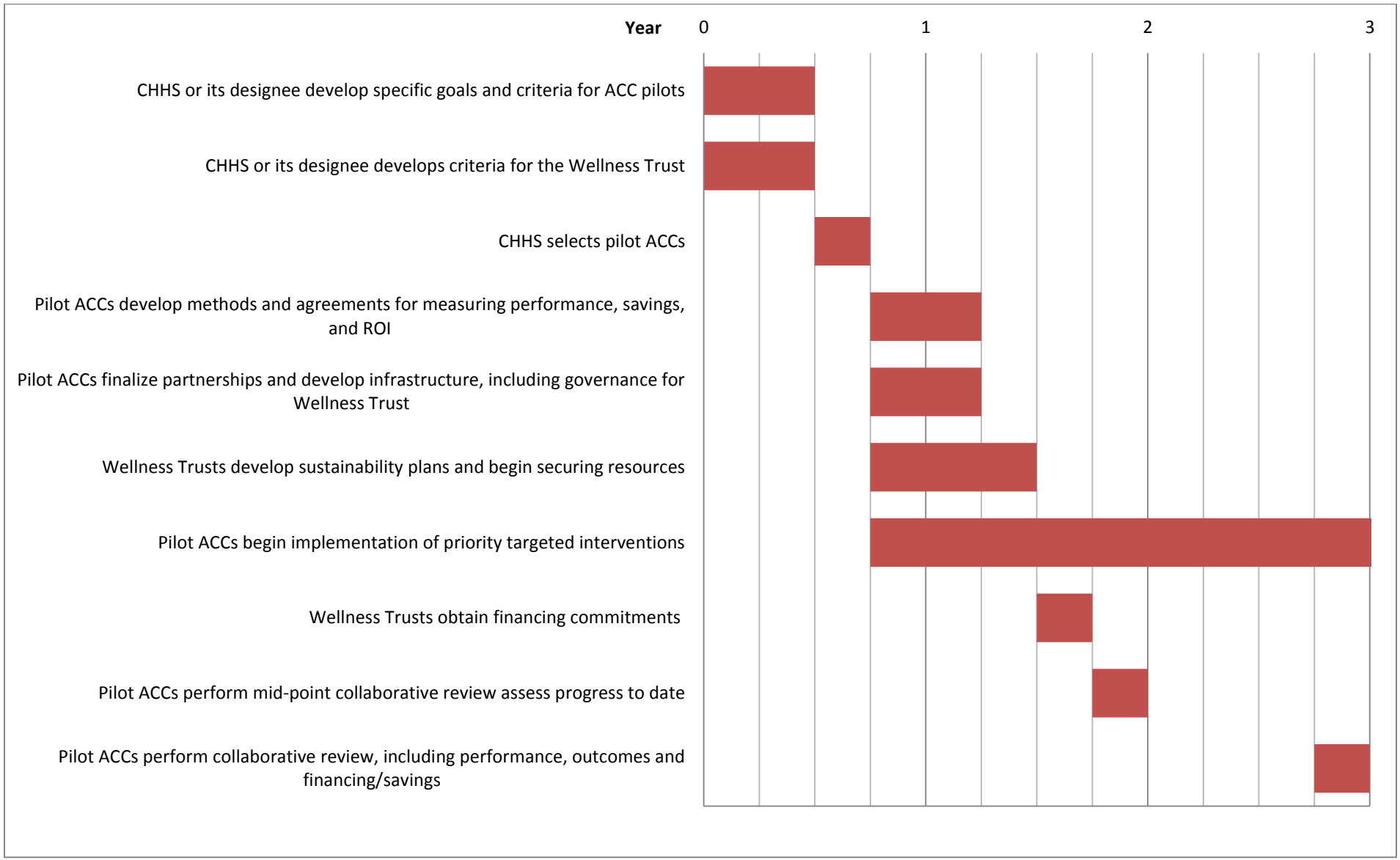
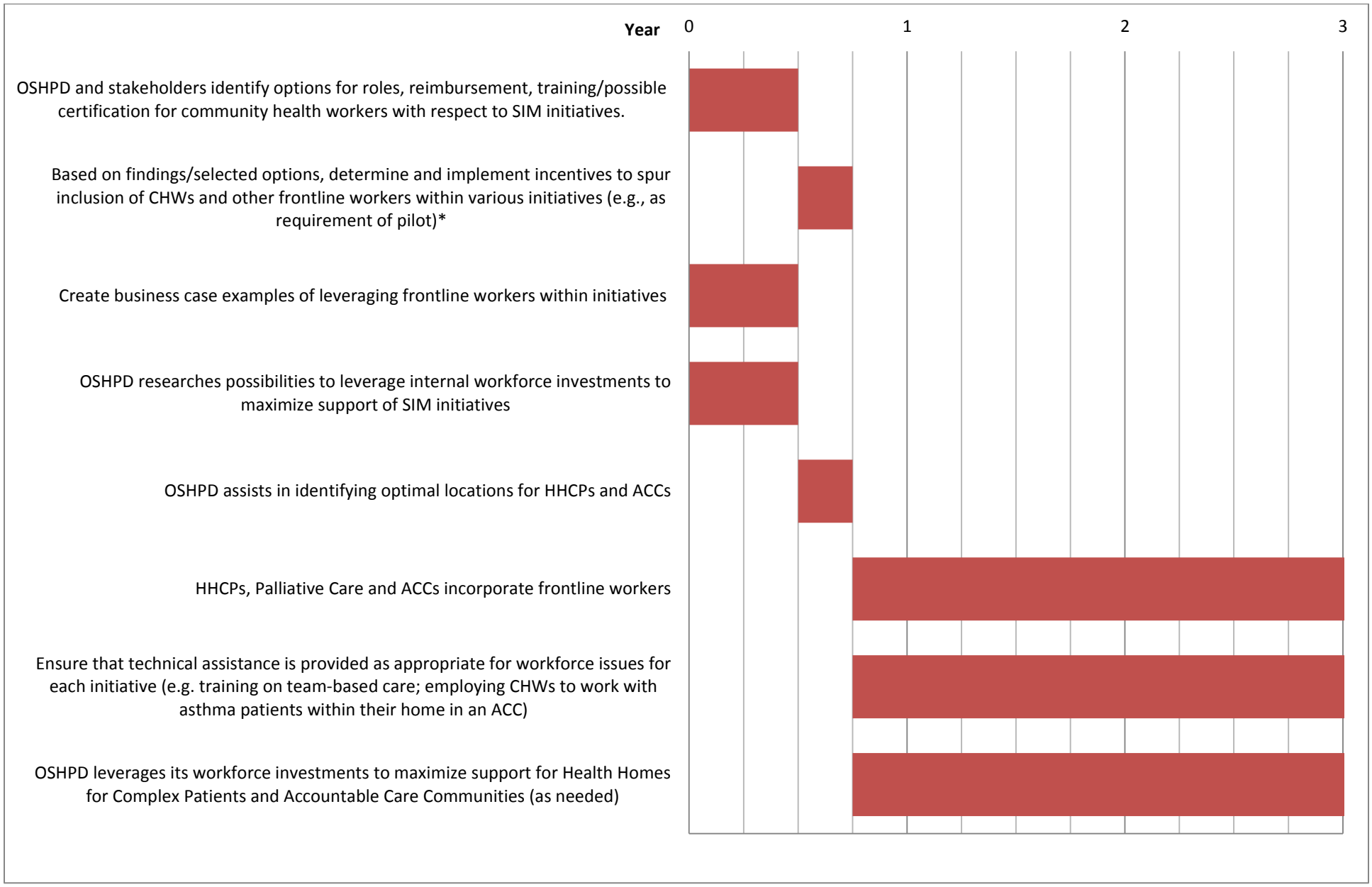


Figure VI.5 Key Activities for Workforce



* Each initiative work group/staff will be tasked with ensuring that CHWs/promotores/other frontline workers are incorporated into their respective efforts.

Figure VI.6 Key Activities for Health Information Technologies and Exchange

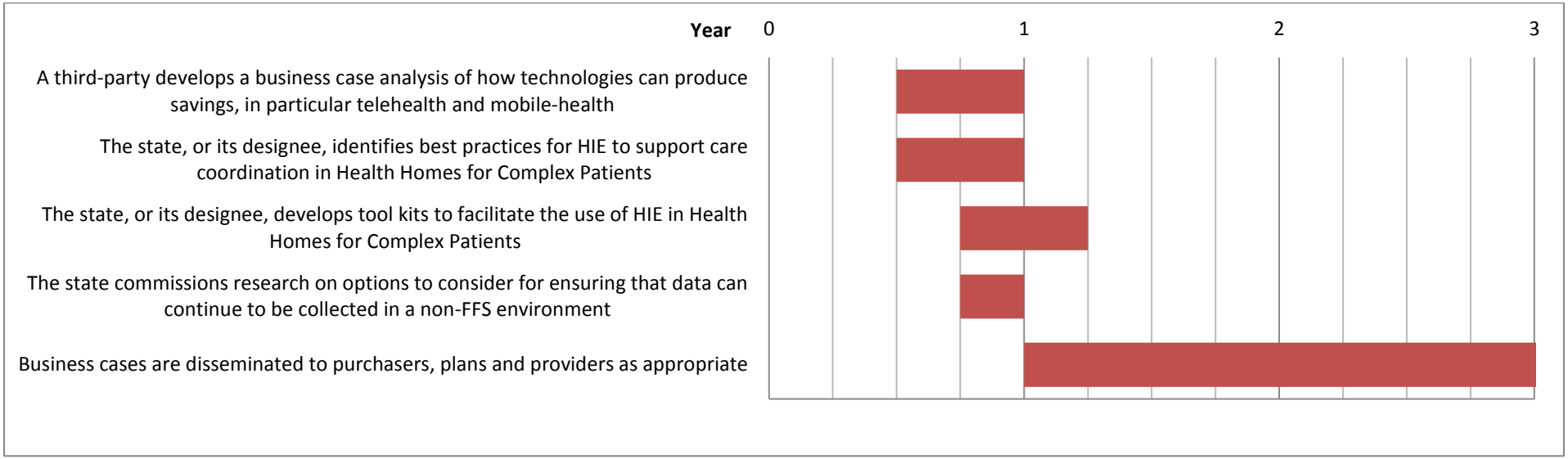


Figure VI.7 Key Activities for Enabling Authorities

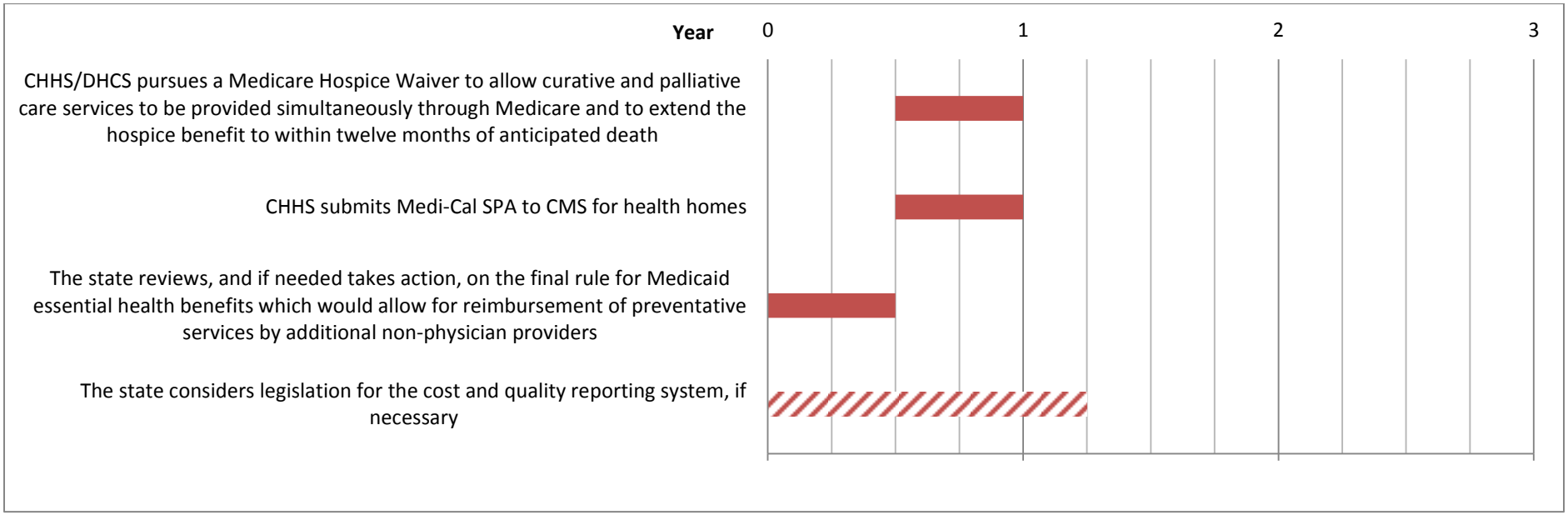


Figure VI.8 Key Activities for the Cost and Quality Reporting System

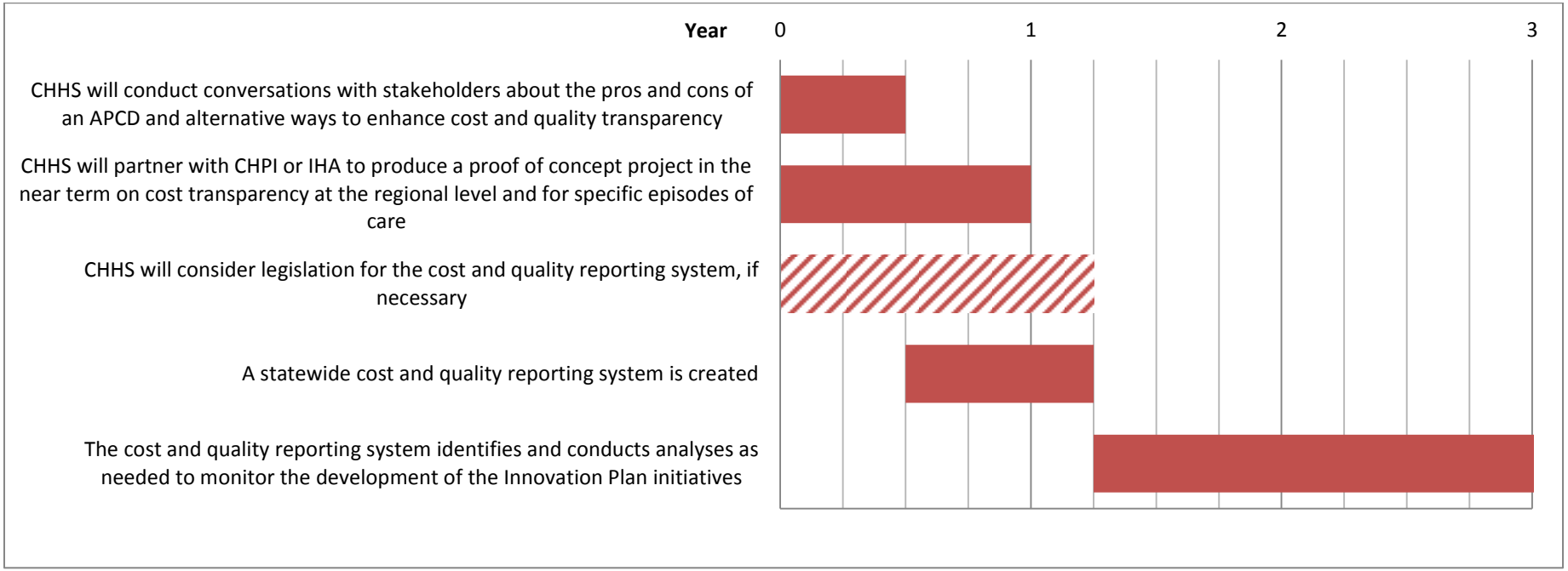


Figure VI.9 Key Activities for Public Reporting

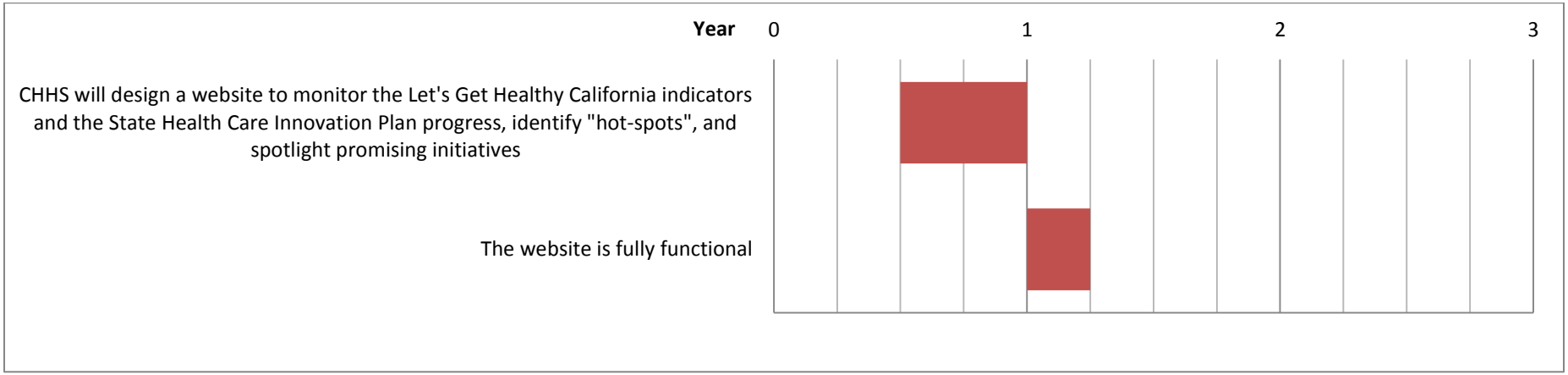


Figure VI.10 Key Activities for Payment Reform Innovation Incubator

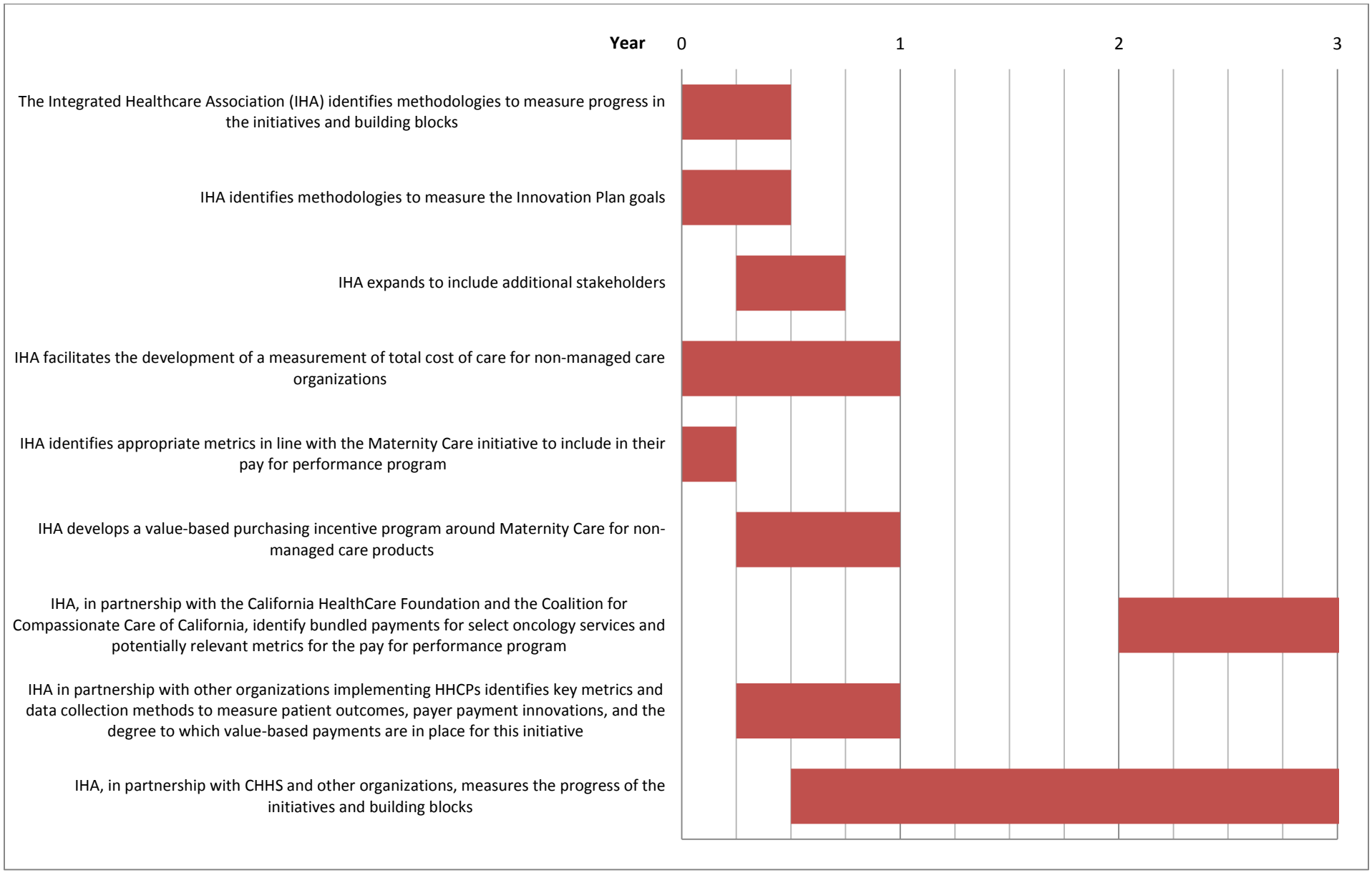
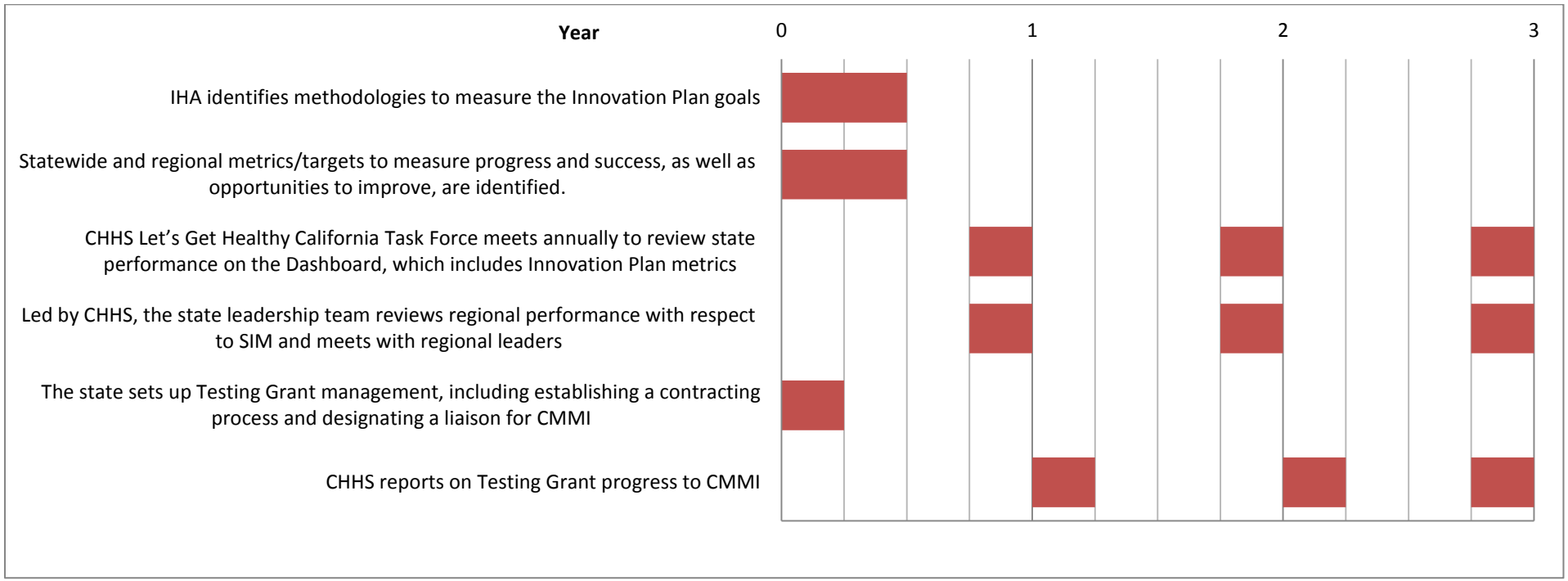


Figure VI.11 Key Activities for Accountability



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